

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY -- NOMINATION FORM

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SEE INSTRUCTIONS IN HOW TO COMPLETE NATIONAL REGISTER FORMS
TYPE ALL ENTRIES -- COMPLETE APPLICABLE SECTIONS

1 NAME

HISTORIC
Flint Run Archeological District
AND/OR COMMON
Flint Run Complex; Thunderbird

2 LOCATION

STREET & NUMBER
[REDACTED] NOT FOR PUBLICATION
CITY, TOWN Front Royal VICINITY OF 007 (J. Kenneth Robinson)
CONGRESSIONAL DISTRICT
STATE Virginia CODE 45 COUNTY Warren CODE 187

3 CLASSIFICATION

CATEGORY	OWNERSHIP	STATUS	PRESENT USE
<input checked="" type="checkbox"/> DISTRICT	<input type="checkbox"/> PUBLIC	<input type="checkbox"/> OCCUPIED	<input checked="" type="checkbox"/> AGRICULTURE
<input type="checkbox"/> BUILDING(S)	<input checked="" type="checkbox"/> PRIVATE	<input checked="" type="checkbox"/> UNOCCUPIED	<input type="checkbox"/> COMMERCIAL
<input type="checkbox"/> STRUCTURE	<input type="checkbox"/> BOTH	<input type="checkbox"/> WORK IN PROGRESS	<input type="checkbox"/> EDUCATIONAL
<input type="checkbox"/> SITE	<input type="checkbox"/> PUBLIC ACQUISITION	<input type="checkbox"/> ACCESSIBLE	<input type="checkbox"/> ENTERTAINMENT
<input type="checkbox"/> OBJECT	<input type="checkbox"/> IN PROCESS	<input checked="" type="checkbox"/> YES: RESTRICTED	<input type="checkbox"/> GOVERNMENT
	<input type="checkbox"/> BEING CONSIDERED	<input type="checkbox"/> YES: UNRESTRICTED	<input checked="" type="checkbox"/> SCIENTIFIC
		<input type="checkbox"/> NO	<input type="checkbox"/> INDUSTRIAL
			<input type="checkbox"/> MILITARY
			<input type="checkbox"/> OTHER:

4 OWNER OF PROPERTY

NAME John D. Flynn, Jr. (1700 + acres) and multiple private ownership
STREET & NUMBER Thunderbird Ranch
CITY, TOWN Front Royal STATE Virginia
VICINITY OF

5 LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC. Warren County Court House
STREET & NUMBER
CITY, TOWN Front Royal STATE Virginia

6 REPRESENTATION IN EXISTING SURVEYS

TITLE Middle Shenandoah Valley Research
DATE 1971 to present
DEPOSITORY FOR SURVEY RECORDS Anthropology Department
CITY, TOWN Washington STATE D.C.

7 DESCRIPTION

CONDITION		CHECK ONE	CHECK ONE
<input type="checkbox"/> EXCELLENT	<input type="checkbox"/> DETERIORATED	<input type="checkbox"/> UNALTERED	<input type="checkbox"/> ORIGINAL SITE
<input checked="" type="checkbox"/> GOOD	<input type="checkbox"/> RUINS	<input checked="" type="checkbox"/> ALTERED	<input type="checkbox"/> MOVED DATE _____
<input type="checkbox"/> FAIR	<input checked="" type="checkbox"/> UNEXPOSED		

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

The Flint Run Archeological District consists of approximately 2300 acres, over 1600 acres of which, the Thunderbird Ranch and Thunderbird Museum and Archeological Park, are owned by one person, John D. Flynn, Jr. The bulk of the remainder of the district is owned by the Maddoxes, Lockharts and Baggarlys, all of whom have been cooperative with our endeavors. The object of an intense interdisciplinary research program since 1971, the district contains numerous archeological sites covering almost the entire time period of man's known habitation of North America. The research program has been conducted during this time by Dr. William M. Gardner of Catholic University of America, Washington, D.C., and his colleagues and the Thunderbird Research Corporation, a non-profit research corporation based in Virginia.

The major prehistoric periods represented in the district cover the time span from approximately 9500 B.C. to 1600 A.D. In addition, there are a few historic sites within the district. These periods include (dates when given are rounded and approximated and beginning dates):

Paleo-Indian to Early Archaic (ca 9500 to 6500 B.C.)

Clovis	9500 B.C.
Middle Paleo-Indian	9000 B.C.
Dalton-Hardaway	8500 B.C.
Palmer	8000 B.C.
Kirk	7500 B.C.
Kirk A	7000 B.C.
Warren	6500 B.C.

Middle Archaic (ca 6000 B.C. to 1000 B.C.)

LeCroy	6000 B.C.
Stanly	5000 B.C.
Morrow Mountain	4000 B.C.
Guilford	3500 B.C.
Halifax	3000 B.C.
Savannah River	2000 B.C.

Woodland (ca 1000 B.C. to 1600 A.D.)

Marcey Creek	1000 B.C.
Stony Creek	750 B.C.
Middle Woodland	500 A.D.
Late Woodland	1300 A.D.

With the exception of a 500 year gap between 6500 and 6000 B.C., this represents a continuous unbroken cultural record. In addition to covering this temporal span, prehistoric sites within the district show a close correlation with several environmental variables and a correspondingly wide range of adaptive patterns. Historic sites include a natural river crossing used since the 1750's and its associated road bed; Civil War trenches used to protect the river crossing; a furnace of as yet unknown (see continuation sheet 1)

8 SIGNIFICANCE

PERIOD	AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW			
<input checked="" type="checkbox"/> PREHISTORIC	<input checked="" type="checkbox"/> ARCHEOLOGY-PREHISTORIC	<input type="checkbox"/> COMMUNITY PLANNING	<input type="checkbox"/> LANDSCAPE ARCHITECTURE	<input type="checkbox"/> RELIGION
<input type="checkbox"/> 1400-1499	<input type="checkbox"/> ARCHEOLOGY-HISTORIC	<input type="checkbox"/> CONSERVATION	<input type="checkbox"/> LAW	<input type="checkbox"/> SCIENCE
<input type="checkbox"/> 1500-1599	<input type="checkbox"/> AGRICULTURE	<input type="checkbox"/> ECONOMICS	<input type="checkbox"/> LITERATURE	<input type="checkbox"/> SCULPTURE
<input type="checkbox"/> 1600-1899	<input type="checkbox"/> ARCHITECTURE	<input type="checkbox"/> EDUCATION	<input type="checkbox"/> MILITARY	<input type="checkbox"/> SOCIAL/HUMANITARIAN
<input type="checkbox"/> 1700-1799	<input type="checkbox"/> ART	<input type="checkbox"/> ENGINEERING	<input type="checkbox"/> MUSIC	<input type="checkbox"/> THEATER
<input type="checkbox"/> 1800-1899	<input type="checkbox"/> COMMERCE	<input type="checkbox"/> EXPLORATION/SETTLEMENT	<input type="checkbox"/> PHILOSOPHY	<input type="checkbox"/> TRANSPORTATION
<input type="checkbox"/> 1900	<input type="checkbox"/> COMMUNICATIONS	<input type="checkbox"/> INDUSTRY	<input type="checkbox"/> POLITICS/GOVERNMENT	<input type="checkbox"/> OTHER (SPECIFY)
		<input type="checkbox"/> INVENTION		

SPECIFIC DATES 10,000 B.C. - 1600 A.D. BUILDER/ARCHITECT

STATEMENT OF SIGNIFICANCE

The significance of the Flint Run Archeological District lies in the fact that within its boundaries are sites which cover the entire range of cultural and ecological changes over the past 12,000 years, or the known range of man's history in Eastern North America. The potential and district holds for prehistoric, paleoenvironmental and paleo-cultural ecological studies over this broad time range has importance for the entire field of anthropology and transcends the local area. Specifically the districts importance lies in the following areas:

1. Regional chronological development
2. Studies of change in almost all aspects of cultural systems including adaptive strategies, settlement patterns, exploitative patterns, technology, demography, social patterns, religious patterns, trade and warfare.
3. Contributions to the field of paleo-cultural ecology and man land relationships
4. Development of local and regional climatic and biotic sequences
5. Contributions to the field of paleo-environmental studies
6. Synchronic studies of all the aspects of cultural systems mentioned in 1 above
7. Contributions to the field of inter-disciplinary studies

Integrated multi-disciplinary research conducted in the district and general area since 1971 have already made considerable strides in the direction of the seven points outlined above. Briefly, the following highlights of the research results can be noted as follows:

The development of a chronological sequence for the Middle Shenandoah Valley with ramifications for the Middle Atlantic Eastern North America in general.

The development of a paleo-ecological sequence for the Middle Shenandoah Valley with ramifications for the Middle Atlantic and Eastern North America in general.

Discovery of the first completely undisturbed Paleo Indian site in Eastern North America(Thunderbird, 44WR11)

Discovery of the only known site in North America exhibiting stratigraphy and cultural continuity between beginning Paleo Indian and terminal Early Archaic (Thunderbird, 44WR11).

Discovery of the earliest reported evidences of structures in The New World(44WR11)

Development of the only fully complete and documented Paleo Indian settlement pattern in North America.

(see continuation sheet 9)

9 MAJOR BIBLIOGRAPHICAL REFERENCES

William M. Gardner

1972 Some Thoughts Concerning Paleo-Indians In the Eastern Woodlands including a Proposed Model Based on Excavations at the Thunderbird. Paper presented at the Eastern States Archeological Federation, November, 1972. Abstract published in the 1973 Eastern States Archeological Federation Newsletter (see continuation sheet 10)

10 GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY 1900 +

UTM REFERENCES

A	ZONE	EASTING	NORTHING	B	ZONE	EASTING	NORTHING

VERBAL BOUNDARY DESCRIPTION

[REDACTED]

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE	CODE	COUNTY	CODE
STATE	CODE	COUNTY	CODE

11 FORM PREPARED BY

NAME / TITLE

Dr. William M. Gardner, Chairman

November 25, 1975

ORGANIZATION

Anthropology Department

DATE

STREET & NUMBER

The Catholic University of America

TELEPHONE

(202) 635-5080

CITY OR TOWN

Washington

STATE

D.C.

12 STATE HISTORIC PRESERVATION OFFICER CERTIFICATION

THE EVALUATED SIGNIFICANCE OF THIS PROPERTY WITHIN THE STATE IS:

NATIONAL

STATE

LOCAL

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service.

STATE HISTORIC PRESERVATION OFFICER'S SIGNATURE

Junius R. Fishburne, Jr., Executive Director
Virginia Historic Landmarks Commission

DATE DEC 16 1975

FOR NPS USE ONLY

I HEREBY CERTIFY THAT THIS PROPERTY IS INCLUDED IN THE NATIONAL REGISTER

DATE

DIRECTOR, OFFICE OF ARCHEOLOGY AND HISTORIC PRESERVATION

ATTEST:

DATE

KEEPER OF THE NATIONAL REGISTER

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Flint Run Archaeological District, Warren County, Virginia

CONTINUATION SHEET

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4. OWNERS OF PROPERTY

1. Charles C. Ryan
P. O. Box 307
Front Royal, VA 22630

2. Frank Lawson
1004 Chillum Road
Hyattsville, MD, 20782

3. Lewis M. Costello
20 S. Cameron Street
Winchester, VA 22601

4. Charles G. Anderson
501 S. Royal Avenue
Front Royal, VA 22630

5. Bradley K. Haynes
501 S. Royal Avenue
Front Royal, VA 22630

6. John D. Flynn, Jr.
501 S. Royal Avenue
Front Royal, VA 22630

7. James E. Williams
135 N. Royal Avenue
Front Royal, VA 22630

8. Colonel Frank Johnson
8613 Raleigh Avenue
Annandale, VA 22003

9. Fred J. Zaun
Rt. 340 S
Front Royal, VA 22630

10. J. Curtis Whited
Rt. 340 S
Front Royal, VA 22630

11. L. W. Tice
Rt. 340 S
Front Royal, VA 22630

12. William Leake
Rt. 340 S
Front Royal, VA 22630

13. Ollie A. Lockhart
Rt. 340 S
Front Royal, VA 22630

14. W. A. Maddox
Limeton, VA 22630

15. Gary G. Baggarly
Box 193B
Bentonville, VA 22610

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date and function; a silo of unknown age but architecturally unique within this area of the Shenandoah Valley; and a barn dating to the late 1800's or early 1900's constructed of chestnut, which is of course no longer available.

Considered as a district the area is unique in providing such a broad temporal and functional range of occupation, a diversity of natural habitats, a changing picture of cultural patterns and environmental settings through time, and the opportunity to study such cultural and natural diversity in a relatively limited geographic space.

Environmentally the area exhibits numerous contrasts within the district boundaries. These contrasts are manifested in both horizontal and vertical resource zonations, and as past work has shown, the various sites, both discovered and undiscovered, provide an excellent potential for paleo-ecological reconstruction through studies of pollen, stratigraphically separated floodplain swamps, sinkhole and cave deposition, phytoliths, changes in river geometry, sediment analysis, variations in river bed load, etc. Human habitation in the district has been shown to be closely associated over the past 12,000 years with these environmental variables and the changing climatic and biotic picture.

On a north-south transect, the Flint Run area can be divided into three broad zones: the floodplains, uplands and foothills. Crosscutting these zones is a division based on the underlying bedrock. To the west, this is shale, to the east, limestone. All of these divisions are important determinants in habitat formation and variability and strongly influence the types of cultural patterns which developed.

The floodplain stretches from the [REDACTED] and varies in width, the widest portion being in the shale area with the river constricting sharply where the bedrock types change. The floodplain and the river have varied in width and depth through time. Much of the variation is related to two factors, the underlying lithology including bedrock type, rock layering, fractures and fault zones, and changing climate and vegetation. Our research program in the district has placed us in the position where we can accurately predict the course of the river over the past 15,000 years. Such predictions are invaluable in locating archeological and paleoecological sites.

Cultural occupations within the floodplain are associated with three environmental variables; the position of the [REDACTED], the location of streams which drain the uplands and cut across the floodplain, and floodplain bogs or swamps. Base camps and/or villages are associated with the former two, while specialized extraction sites are associated with the latter. Lateral streams, except those draining the Blue Ridge such as Flint Run, are extinct in the limestone part of the floodplain, but are still seasonally extant in the shale area. Swamps occur today and apparently in the past only in the shale zone. These swamps have been observed to be a focal point for the gathering of a diversity of terrestrial and avian fauna as well as a specialized vegetation. A radiocarbon date on the deepest

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of these swamps shows that they were present as long as 12,000 years ago.

Considerable knowledge of the floodplain has been gained since research was initiated in 1971. At least three buried terraces dating from between 15,000 and 8,000 years ago are known. The burial of these terraces by both colluviation and alluviation has resulted in the stratification and protection of several Paleo Indian to Early Archaic components as well as later sites.

Upland areas are marked by gradual to steep rises at the limits of the 15,000 to 12,000 B.P. floodplain. The beginning of the upland is an even older terrace dating back 70,000 to 40,000 years ago. At least four even more ancient terraces are known. Geologists are currently attempting to relate these to glacial-interglacial episodes within the Pleistocene. To the south and east, the uplands terminate at the interface between the meta-volcanics and the sedimentary rocks of the Valley floor, or between the 800 and 900 foot contour intervals which is the extent of the earliest Pleistocene terrace of the South Fork. Along this interface is the Front Royal Thrust Fault where the Blue Ridge was thrown up and over the old bed of the ancient inland sea. Jasper, which was the principal lithic raw material for the Paleo Indians and Early Archaic populations, began forming at various areas either at the foothills of Massanutten Mountain or the margins of the Great Valley. The upland environment consists of a mixture of gallery, valley floor (dominant), ravine and mountain slope forests. The heads of springs have cut deep gulleys in the shale area. Sinkholes are numerous in the limestone zone. Vegetation varies somewhat with bedrock variation. The entire area is well-drained. River gravels from various beds of the South Fork occur at different intervals and were important raw material sources for post-6000 B.C. groups.

Archeologically the uplands are the locus of two types of specialized activity sites: hunting-gathering camps and burial mounds. In the Flint Run Archeological District, there are at least 12 mounds. Very little is known about these mounds but work in one of them promises to alleviate this situation (for further comment on the mounds see discussion below under Mound #5, 44WR47). Constructed largely of Pleistocene river gravels, they are often referred to as stone mounds. The mounds always occur in groups of two or three located at the point of a headland which is bordered by ravines on either side. All are located within the shale zone. Hunting and gathering camps occur at essentially the same contour interval as the mounds, ca 700-750 ft., and are always associated with some water source, either extinct or extant. Gravels at this elevation served as a source of lithic raw material. Based on present day ecological considerations, it would appear that these camps were fall and winter hunting and nut gathering stations. However, since none of these sites has been well studied this interpretation is open to modification. None of these types of sites so far discovered predates 6,000 to 5,000 B.C., which is predictable on the basis of environmental change which culminated at this time in the Atlantic of Climatic Optimum. A number of hearths which have not been disturbed since they were laid down occur on the surface of this zone. Their shallowness relates to post-Contact erosion of the topsoil.

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Foothill sites are hunting and gathering stations much like similar sites in the uplands. All are post-6000 B.C. Such sites are located near present or past water sources and are usually in areas where quartzite, quartz, or greenstone basalt was available for use as raw material. The foothills are not included in the archeological district and are mentioned here only for information purposes.

Another zone which lies out of the district is the mountain area. Prehistoric occupation has been traced to these zones and they are all of the seasonal, specific activity kinds. Most of the mountain sites lie in either the Shenandoah National Park (Blue Ridge) or George Washington National Forest (Massanutten).

The Thunderbird Museum and Archeological Park occupies approximately 86 acres of the Flint Run Archeological District. Conceived of in 1972, the Museum and Park opened in June, 1974. Developed and directed by Dr. William M. Gardner and his students, the land and building as well as the graphic and display work was paid for by Mr. John D. Flynn, Jr. Although a privately owned commercial enterprise, the principal purpose of the Museum and Park is to develop funds for continuing archeological-ecological research and to convey the results of this research to the visiting public who are charged a basic fee. The three basic facets of the Museum and Park are a building in which are housed artifacts and interpretive displays detailing the geological, environmental and archeological history of the Shenandoah Valley; outdoor displays including in situ prehistoric cultural features such as excavated hearths and reconstructed dwellings, as well as nature trails with descriptions of various natural and cultural features; and a guided tour of archeological excavations in progress. All of these elements are designed to be integrated into an interrelated but separable whole. The non-profit Thunderbird Research Corporation is also based here.

The sites included in the district which have so far been given Virginia state designations are as follows (these are by no means all the sites discovered but only represent the ones which for investigative purposes have been given site numbers and/or names):

Thunderbird (44WR11)--a stratified Paleo Indian to Early Archaic quarry related base camp covering the period from ca 10,000 to 6500 B.C. The known extent of this site is ca 5000 by 300 feet. Situated on the edge of a buried terrace of the South Fork, the site slopes slightly from north to south. Most of it is safely buried but a portion of the northern part of the site is in the plow disturbed zone. The Thunderbird is one of the most, if not the most, important site of its kind and time period in North America. To date excavations have shown that it contains the oldest reported evidence of a structure in the Western Hemisphere; the only site that shows cultural continuity from the beginning Paleo-Indian period to terminal Early Archaic; and is one of the few undisturbed

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or uncontaminated sites of this period. Excavations have been conducted here since 1971 but due to the nature of the stratigraphy and the density of occupation at any given level, only small areas have been opened. As a quarry related base camp, the Thunderbird is that locus within the Paleo-Indian to Early Archaic settlement system worked out for the East, to which the occupants at this period returned for refurbishment of their tool kits.

Flint Run Quarry(44WR4)--a jasper quarry area which was the focal point of lithic mining during the Paleo Indian to Early Archaic period(and probably during Middle and Late Woodland). The Flint Run quarry site is but one of the known outcrops of jasper. It was the most extensively used in the local area. Part of a now known series of jasper outcrops which occur along the greater Blue Ridge Thrust Fault and range from Pennsylvania to Tennessee along the Great Valley, the quarry area is littered with debitage from the initial stages of lithic reduction. Very little work has been done in the quarry area because of the density of vegetation and the logistics of excavations.

Fifty(44WR50)--a stratified Paleo Indian to Early Archaic periodically revisited hunting-processing camp. The extent of this site is unknown. Located partially on an alluvial fan and in an interfan area, the Fifty site is the marker type for its activity designation in the Flint Run Paleo Indian complex. The diagnostics are heavy cutting, chopping, crushing and butchering tools, as well as fine flake and bifacial cutting and processing tools. Clear-cut spatial separation of activities involving the use of these types of tools are a hallmark of the Fifty site. It is but one of the several similar sites known to be scattered along the shale area of the floodplain on fan and interfan areas. The focal point of occupation are now buried floodplain swamps which were extant during the period between 10,000 and 6500 B.C. It is undoubtedly associated with a kill site(see the Fifty Bog).

Fifty Bog(44WR53)--a buried floodplain swamp dating between 10,000 and 7000 B.C. The bog is 11 feet below the present surface and contains well preserved organic materials including nuts, seeds, limbs, roots, leaves, berries, etc. A radio-carbon date of 7200 B.C. was obtained on the topmost portion of the bog. It is assumed that animal bones associated with whatever was killed by the 50 site hunters lie somewhere in the bog. Two small test excavations ran into groundwater problems. In the strata cuts into the bog, others were noted in the profiles at progressively younger levels although no dates were ascertained. One of the upper bogs dates around 4000 B.C. The importance of these bogs is that they and the resources they attracted were being periodically exploited by cultural groups throughout the prehistoric record. Not only can they provide insight into exploitative patterns, they also provide an excellent record of changing vegetation throughout the past 12,000 years, at least in the floodplain niche.

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Lockhart(44WR20)--a Paleo Indian to Early Archaic lithic reduction station. The Lockhart site consists of two basic zones, a stratified Paleo-Indian to Early Archaic occupation on a higher terrace, and a deeply buried Early Archaic on a buried terrace closer to the present course of the South Fork. Situated at the junction of Flint Run and the South Fork, the Lockhart site has been saved from erosion because Flint Run is a barbed tributary at its mouth and flows upstream into the South Fork because its bed is in a geologic fault. As a lithic reduction station, the Lockhart site occupies a position between the Thunderbird base camp and the quarry area. Finished tools are rare, except those used in primary quarry block reduction. It is the only known site of its kind in our area but compares favorably to other reported but unclassified sites elsewhere in the East. Presumably such sites exist only when there is some barrier or some distance involved between base camps and quarries.

Rudacil(44 WR5)--a 16 acre site whose surface is littered with jasper debitage most of which is either Paleo Indian or Late Woodland. Initial work demonstrated that these temporally different occupations were distributed according to the age of the Flint Run floodplain. The older material is confined to the older terraces, the younger closer to the present location of Flint Run. Efforts to locate buried deposits along buried terraces resulted in the discovery of an occupation that covers the period from ca 2000 B.C. to 6000 B.C. This occupation begins two feet below the present surface and is capped by a recent A horizon and a 4-2000 year old B horizon. The cultural occupation begins in a buried A horizon and continues down into a second B horizon.

Dry Run(44WR60)--a stratified site covering the period from Middle Woodland(ca 1000 A.D.) to Late Archaic(ca 2000 B.C.). The Dry Run site contains excellent stratigraphy covering the above time period and possesses a unique and as yet unexplainable cultural feature--a stone wall roughly three feet high and sloping to a basal width of approximately 10 feet. This wall is associated with steatite bowl fragments dating from ca 2000 B.C. and the top of it lies 1.5 feet below the surface. Aerial photographs indicate it may form an oval pattern of some 200 feet in dimension. Our excavations into this site have only just begun and since it is comparable to nothing else reported for this time period, little else can be said.

Corral(44WR57)--a deeply buried site(ca 4 feet below the present surface) containing at least two components--both Early Woodland and dating between ca 750-1000 B.C. The earliest component contains steatite tempered ceramics(ca 1000 B.C.) while the later contains sand tempered Stony Creek ware(ca 750 B.C.).

Mound #5(44WR47)--a burial mound dating somewhere between the Late Archaic(ca 2000 B.C.) and the Middle Woodland(ca 1000 A.D.). Work has just begun on these mounds so their specific chronology is not known. Like most of the mounds in the district

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it was excavated in the center by vandals. In an effort to determine if anything was left of these mounds, in addition to determining their age, excavations were initiated on this unit. To date one linear grave containing two artifacts and capped with stones, and a large central grave capped with stones and forming a primary mound have been uncovered. Indications are that there are other graves scattered around the outside edge of the mound. The single linear grave which was excavated contained two artifacts, a semi-rectangular three hole gorget, and a large side-notched knife of some non-local material. Because of the acidity of the soil, bones are absent.

These are the sites within the district which have been subjected to some form of formal investigation. Others, with surface manifestations, which have been given numbers for one reason or another are listed below. Their chronological position when known is also given. This does not mean that this was the only period during which they were occupied. There are undoubtedly numerous buried sites, as our research has shown, especially within the floodplains, or at the floodplain-uplands margins as a result of either alluviation or colluviation.

Maddox #1(44WR14)--Woodland and Middle Archaic
Maddox #2(44WR15)--Woodland and Middle Archaic
Maddox #3(44WR16)--Woodland and Middle Archaic
Maddox #4(44WR17)--Woodland and Middle Archaic
Maddox #5(44WR23)--Woodland and Middle Archaic
Maddox #6(44WR24)--Woodland and Middle Archaic
Maddox #7(44WR25)--Woodland and Middle Archaic
Gil (44WR18)--probably Paleo Indian
Leek-Tice(44WR21)--probably Paleo Indian
Lockhart Quarry(44WR22)--probably Paleo Indian
Thunderbird Sinkhole #2--Middle Archaic and later.
McCoys Ford #1 (44WR28)--Late Woodland Stockaded village
McCoys Ford #2 (44WR29)--Late Woodland Stockaded village
McCoys Ford #3 (44WR30)--Land Woodland Stockaded village
McCoys Ford #4 (44WR31)--Woodland
McCoys Ford #5 (44WR32)--Woodland
McCoys Ford #6 (44WR33)--Woodland
McCoys Ford #7 (44WR34)--Woodland
Dry Run #1 (44WR35)--Unknown
Dry Run #2 (44WR36)--Unknown
Dry Run #3 (44WR37)--Unknown
Dry Run #4 (44WR38)--Unknown
Mound #1 (44WR43)
Mound #2 (44WR44)
Mound #3 (44WR45)
Mound #4 (44WR46)
Mound #7 (44WR58)

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Indian Garden (44WR*)
(44WR59)
Redtail Cave (44WR61)

A number of modern buildings and houses are in the proposed district. Most of these are located in the uplands in the quarry areas adjacent to U.S. 340 where erosion has been heavy. They have done little damage to the integrity of the area since the greatest portion of the district is in woodland or farmland. The Thunderbird Museum building is a modified house dating from the 1940's. Culturally the building itself is of little significance. The artifacts, displays, etc. are, however, important.

There are at least five units within the district which are of historic significance. These are as follows:

McCoys Ford---a natural river crossing which has been important in the area since at least 1750 A.D. On the Northern side of the floodplain, the Hurricane Agnes flood of 1972, stripped away the alluvium on top of the old McCoys Ford roadbed. Wagon tracks, carriage tracks, and horse hoof prints were clearly visible in the bed. Artifacts were scattered along either side of the road bed. The ruins of a structure are visible at the point where the road leaves floodplain and heads into the uplands. There is no date on this structure nor is any function known, but presumably it occupied a strategic position relative to the ford road.

Civil War trenches---a series of Civil War defensive-offensive trenches located in the uplands overlooking McCoys Ford. These are known to have been areas which were used during the Civil War to keep control of McCoys Ford. They are largely undisturbed although somewhat eroded.

Furnace---a furnace of unknown function and date located in the limestone uplands between 44WR50 and 44WR11. Presumably this furnace was used for lime burning, but no work has been done here.

Dry Run Silo---a silo(probably) of unknown antiquity but unique construction. This structure which is in need of stabilization is approximately 60 feet high and polygonal in outline. It is constructed of large timbers and thin slats. The interior was modified at some time by the addition of a cement and stucco coating.

Downing Barn---a large barn constructed during the late 1800's or early 1900's. Typical of the large multi-purpose barns of the Valley, this particular structure is relatively unique because the bulk of its structural elements are of chestnut, a type of timber which has not been available since the 1930's.

In summary, the Flint Run Archeological district is unique in containing within its boundaries an almost complete record of human habitation in the Shenandoah Valley during the last 12,000 years; an equally complete record of climatic and environmental changes during

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this period and earlier; and a close correlation of human habitation and environmental exploitation allowing for the opportunity to study the full range of man's behavior. It is rare that such elements all come together in a limited geographic space.

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Complete alteration in the definition of what Eastern Paleo Indian was.

Discovery of and identification of the only known stratified Paleo Indian to Early Archaic hunting-processing camp (Fifty,44WR50).

Discovery of the only extinct habitat dating during the Late Pleistocene and Early Holocene known to be associated with human occupation and containing preservation of organic materials (Eastern North America).

Discovery that not all jasper sources occur in one area thereby casting doubt on the credibility of Paleo Indian trade and migration.

Discovery of several stratified sites covering different time ranges and encompassing the entire time range of man in Eastern North America.

Establishment of the first unified settlement pattern covering all possibilities and temporal periods.

Organization and application of the first integrated multi-disciplinary prehistoric research program in the East.

In summary, the potential contribution of the district, the contributions which research in the district has already made, in addition, to the lack of modern disturbances, have great import at the local, areal, regional and national levels. Although research has been heavily oriented since 1971 in the direction of the earliest prehistoric occupations (10,000-6500 B.C.), our expanded program has demonstrated the potential for equally as great contributions in the later periods.

See also attached newspaper articles

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- 1974 The Flint Run Paleo-Indian Complex: A Preliminary Report 1971-73 Seasons, William M. Gardner, Editor. Occasional Publication No. 1, Archeology Laboratory, Department of Anthropology, Catholic University of America, Washington, D.C.
- n.d. The Thunderbird Paleo-Indian Site and The Middle Shenandoah Valley Research Program: An Overview 1971-74. Paper to be published in The National Geographic Society, Scientific Series.
- n.d. Paleo-Indian to Early Archaic: Continuity and Change in Eastern North America during the Late Pleistocene and Early Holocene. Paper to be presented at the Ninth International Congress of Pre-Historic and Proto-historic Sciences, Nice, France, and published in the Congress Proceedings.
- Segovia, A.V., Foss, J.E. and William M. Gardner
- 1973 A Geology and Pedology of the Thunderbird Archeologic Site, Shenandoah Valley, Virginia. Abstract, in Programs with Abstracts of the 1973 Annual Meeting of the Northeastern Section of the Geological Society of America, Allentown, Pa.
- 1974 Evolution of Landscape Morphology of a Part of the Shenandoah Valley of Virginia on the Basis of Geologic, Pedologic and Archeologic Evidence, in Proceedings of the 1973 International Geobotany Conference, University of Tennessee, Knoxville.

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The District boundary continues along County Road 623 until it crosses the South Fork of the Shenandoah River directly west and across the river from Kay Landing and Cooney Run. The boundary line then crosses the Norfolk and Western Railroad tracks and intersects with U.S. Route 340 approximately 0.3 mile from the point where it left the Thunderbird Ranch and County Road 623. After encircling the Lockhart property, the boundary follows an old Warren County right-of-way northeasterly across U.S. 340 joining Flint Run at the junction of Flint Run and an unnamed intermittent stream. Proceeding up Flint Run for approximately 0.3 mile, the District line turns northwesterly once more, following the Baggarly property line. The boundary line crosses the Norfolk and Western tracks, turns west until it strikes the Thunderbird Museum and Archeological Park property. Following this line, the District boundary turns to the southwest, then northwest, crosses an unnamed intermittent stream and cuts across the Maddox property. Turning north, the boundary line crosses the South Fork approximately 0.35 mile upriver from McCoy's Ford. Once again following the Thunderbird Ranch property line, the District boundary continues upriver, cuts across County Road 613 where it borders the George Washington National Forest. Then the boundary line parallels County Road 613 until it terminates or closes at the West Entrance to the Thunderbird Ranch.