

**Narratives
For
Wayne County
Resource Inventory Maps**

**Revised April 2016
Prepared by
Wayne County Resource Inventory Council Inc.**

TABLE OF CONTENTS

<u>Title</u>	<u>Page Number</u>
Background Introduction.....	1
I. Narrative - Base Map.....	2
Ia. Narrative - Base Map with Section Lines.....	2
II. Narrative - Zoning.....	3
III. Narrative – Utilities	4
IV. Narrative - Water Resources.....	13
IVa Narrative - Water Availability.....	14
IVb. Narrative - Water Quality - Great and Little Miami River Basins...	14
IVc. Narrative – Water Storage Facilities in Wayne County	14
V. Narrative - General Geologic Features.....	15
VI. Narrative - Depth to Bedrock.....	18
VIa. Narrative - Bedrock Elevation.....	18
VII. Narrative - Land Use - Ground Cover.....	19
VIIa. Narrative - Land Use - Development.....	20
VIII. Narrative - Natural Areas.....	22
Preface.....	23
Ecology of Wayne County.....	24
Botanical Features of Wayne County.....	26
The Waters of Wayne County.....	28
Catalog of Natural Areas of Wayne County.....	30
Alphabetical Listing of Natural Areas of Wayne County.....	31
Listing of Natural Areas of Wayne County by Type.....	32
IX. Narrative - History.....	81
X. Narrative - 1874 History.....	84
XI. Flood Hazard Analysis.....	88

TABLE OF CONTENTS

<u>Title</u>	<u>Page Number</u>
XII. Narrative – 50 Feet Topographic Contour Lines.....	90
XIII. Narrative - General Soil Map.....	92
XIV. Narrative - Potentially Suitable Land Fill Sites Map.....	97
XV. Narrative - Refuse Disposal Sites Map.....	98
XVI. Narrative - Preserving Our Heritage Wayne County GB-3 Restricted District Zoning.....	99
XVII. Narrative - Archeology: Uncovering Wayne County's Past.....	102

INTRODUCTION

Wayne County Resource Inventory Council (RIC) was created in 1976 to assist the citizens of Wayne County to make decisions regarding the best ways to use and preserve the resources of Wayne County. The resource maps that accompany these narratives are one important tool to promote responsible land use planning in Wayne County.

Wayne County Resource Inventory Council began producing the maps in 1976. Many talented and dedicated people have assisted with this project and the funding for these maps has also come from many sources. While it is not possible to list all of the talent and resources that have contributed to the success of this project over many years, the following stand out as major contributors:

The Water Resources Map (4), Water Availability Map (4a), Depth to Bedrock (6) and Bedrock Elevation Map (6a) were produced by Christopher Miller under a National Science Foundation Grant to Earlham College. Christopher Miller worked under the supervision of Ansel Gooding, Ph.D. and Charles Martin, Ph.D. of the Earlham College Geology Department.

The Society for the Preservation and Use of Resources (SPUR), Richmond Board of Realtors and the Wayne County Soil and Water Conservation District provided the initial leadership for the Resource Inventory Project. They were supported by a major grant to the Wayne County Commissioners from the Department of Housing and Urban Development. The Wayne County Commissioners and the City of Richmond have financially supported the project from its beginning.

The narratives that accompany the maps have been written and revised by a variety of experts in the areas pertaining to the specific maps.

RIC hopes that you find these maps and narratives useful in you decision making regarding the responsible use of the resources of Wayne County. If you need additional information or would like a speaker for an organization or function, you can contact the Wayne County Resource Inventory Council at the Wayne County Planning Department, Wayne County Administration Building, Richmond, Indiana 47374 - Phone 317-973-9249.

Shirley Rodgers
President RIC
September 1994

I. NARRATIVE - BASE MAP

The Base Map of Wayne County, Indiana, and the series of acetate overlays have been produced for the purpose of achieving better land use.

It was discovered that accumulated inaccuracies in the Base Map of Wayne County made it impossible to apply geologic and other overlays with proper registry.

The desire was to get a Base Map of the scale of one (1) inch to 3,000 feet, large enough to show most of the important data and yet small enough to be manageable.

To do this, U.S. Geologic Survey planograph maps (without topographic lines or woodland cover color) were reduced to scale and sixteen (16) maps required to cover Wayne County were cut and taped together. This new Base Map was drawn on frosted mylar showing only highways and roads, railroads, streams with permanent flow, cities, towns and villages.

Ia. NARRATIVE - BASE MAP WITH SECTION LINES

A second Base Map was made showing section lines and numbers for purposes of locating points of consideration.

II. NARRATIVE - ZONING

Zoning in Wayne County, Indiana, comes under the jurisdiction of five different agencies. These agencies and their areas of jurisdiction are as follows:

1. Wayne County Plan Commission - all of the unincorporated areas of Wayne County, exclusive of the fringe areas.
2. Richmond Plan Commission - the incorporated area of the City of Richmond and the zoning fringe area adjacent.
3. Cambridge City Plan Commission - the incorporated area of the town of Cambridge City and the zoning fringe area adjacent.
4. Centerville - the incorporated area of the town of Centerville and the zoning fringe area adjacent.
5. Hagerstown - the incorporated area of the town of Hagerstown and the zoning fringe area adjacent.
6. Fountain City – the incorporated area of the town of Fountain City.
7. Spring Grove – the incorporated area of the town of Spring Grove.
8. Dublin – the incorporated area of the town of Dublin.

The above agencies have many zoning districts within their boundaries. They are subject to frequent change, and very few districts correspond with those in other agencies. In order to prepare a county zoning map it was, therefore, decided to only show the unincorporated areas of Wayne County, exclusive of the zoning fringe areas.

These districts were then placed on the Zoning Overlay. A note of caution, due to the scale of the map, the Zoning Overlay can only be used as a broad guideline--actual zoning could only be determined from the respective agencies.

III. NARRATIVE - UTILITIES

An attempt has been made to show the underground and overhead utility lines that have a bearing on land use. The scale (1inch to 3,000 feet) does not permit showing lines within city, town or village limits.

The other exclusion is the telephone lines that are too numerous to show clearly and have no significant bearing on land use since telephone service is available any place. The transcontinental lead line (telephone cables) that traversed the county approximately three (3) miles above the south line is not shown since it has been dismantled.

UNDERGROUND

- I. The Ohio Valley Gas Company (office at 215 W. Franklin, Winchester) has a line entering Wayne County along US 27, south of Lynn, east of Hopewell Methodist Church. It serves Fountain City and follows US 27 south to the Cummings Addition, three miles south.
- II. Central Indiana Gas Company and Richmond Gas Company have been acquired by Indiana Gas Company (Vectren Energy Services). Vectren serves Hagerstown with a line from Muncie that enters Wayne County between Economy and Dalton. Dublin, Mt. Auburn, Cambridge City, East Germantown, and Milton are served from a line entering Wayne County on Hunnicut Road south of Dublin.

Richmond is served with gas from the Panhandle Eastern Pipeline which enters Wayne County just above Middleboro and extends southwest to a regulating station on Elks Road south of the Norfolk Southern Railway tracks (formerly Pennsylvania Railroad). Also serving Richmond is a line that starts on Turner Road at the Panhandle Eastern Pipeline, going west, just north of Richmond to the IMPA plant on Gates Road. A line also runs along US 27 north to the Fairacres subdivision. Centerville is served with a line following National Road (US 40).

- III. British Petroleum (formerly Sohio) has a pipeline, which enters Wayne County just west of Hagerstown. There is a pumping station on Woodpecker Road and from there the line goes northeast leaving Wayne County about midway of the north line.
- IV. The Williams Pipeline Company, Tulsa, Oklahoma (now merged with Agricultural Minerals Corporation) purchased the Gulf Tank Farm (now dismantled) in Henry County just west of Dublin on Bentonville Road south of US 40. With this sale went two pipelines crossing a portion of Wayne County. One line enters Wayne County north of Dublin and goes northeast crossing the British Petroleum line just south of Economy and leaves the county just west of the midpoint of the north county line.

Agricultural Minerals Corporation owns and operates 2 ½ miles of this pipeline from the tank farm terminal on Bentonville Road to the railroad spur just off Williams Sisters Road in Jackson Township. The remainder of this line going northeast from the railroad spur (now dismantled) is still owned by Williams Pipeline Company. This section contains three (3) fiber optic cables operated by the Jaytel Company.

- V. Indiana American Water Company serves Richmond and has a few lines outside corporation limits as shown.
- VI. Richmond Sanitary District lines outside of corporation limits are shown.

- VII. The American Telephone and Telegraph Company (A.T. & T.) has a fiber optic cable running underground in the former Chessie System Railway (CSX) right-of-way northwest from Richmond. This cable runs for 39 miles between Richmond and Muncie.

SPECIAL NOTES:

1. When specific information is desired for any site or utility the main office of that company should be contacted.
2. Indiana Public Law IS-69-1990 requires that any excavating, boring, blasting or disturbing of the earth's surface be preceded by notification of the operators of any underground facilities in the area in question. This requirement includes homeowners as well as excavating contractors. Notification is requested at least two (2) working days in advance to the Indiana Underground Plant Protection Services, Inc. (1-800-382-554, toll free).

I.U.P.S. has established a color code system to aid in identifying utility locations. The categories of utilities are:

1. Red - electric
2. Yellow - gas, oil and petroleum products
3. Orange - communications, telephone, cable TV, fiber optics and traffic signals
4. Blue - water
5. Green - sewer
6. White - proposed expansions

Upon notification, member utilities will send a line locator to the proposed excavation sight to mark underground lines with color-coded flags or stakes according to the color code system. Non-member utilities must be notified by the caller.

DON'T DIG BLIND

OVERHEAD

- I. There are three heavy electrical transmission lines traversing the county, all running in a northwesterly direction, and all owned by the American Electric Power Company with offices in Fort Wayne. They have a stand-by service line connecting with Richmond Power and Light Company.
- II. The Whitewater Valley Rural Electric Membership Corporation with offices at 101 W. Sycamore, Liberty, IN, serves all of Wayne County.
- III. The Public Service Company of Indiana (PSI) serves all the cities, towns and villages of the county except Richmond. The northern part of the county is served by the New Castle Regional Office. The southwestern part of the county is served by the Connersville Region and the southeastern part is served by the Liberty Region. Centerville, Hagerstown and Dublin have their own distribution lines. Hagerstown owns some lines north and northwest of the corporation limits.
- IV. The Richmond Power and Light Company serves limited customers beyond corporation limits along Hwy. 227 Northeast, Hwy. 227 Southeast, Hwy. 27 North and Hwy. 27 South. R. P. & L. has two (2) generation facilities, two (2) interconnections with Indiana-Michigan Electric Company and one (1) interconnection with PSI Energy.

- V. The Indiana Municipal Power Agency has constructed a combination turbine peaking plant and electrical substation on Gates Road just west of Round Barn Road. The turbines are dual fuel (natural gas with fuel oil back-up). IMPA serves 31 municipal power systems within Indiana including Richmond and Centerville. This plant is interconnected with the electrical transmission system.

SURFACE

- I. Norfolk Southern Railway serves Wayne County with a line entering the county just southeast of Richmond from Campbellstown, Ohio. The line passes through Richmond, Greens Fork and Hagerstown going on to New Castle.

Industrial spurs serve the businesses in the industrial park at the southeast side of Richmond, industries in the downtown area and several others located along the former Pennsylvania Railroad main line leading west from the North E Street depot area.

Another line serves the northwest industrial area along the former Pennsylvania line, which ran from Richmond to Fort Wayne through Fountain City. The Farm Bureau (Harvestland) Co-op facility at Walnut Level is also served by Norfolk Southern.

- II. Chessie System Railway (CSX) serves Wayne County with a line entering the county south of Boston and running north to Richmond. Spurs provide service to an agricultural fertilizer and grain facility at Boston as well as industries located along the line coming into Richmond from the south.
- III. An Indiana Hi-Rail line passes through southwestern Wayne County running from New Castle through Cambridge City and Milton to Connersville. A spur (now dismantled) located at the intersection of this line with Williams Sisters Road north of Dublin serves the pipeline terminal of the Agricultural Minerals Corporation located just west of Dublin.
- IV. Cardinal Greenway, Inc., of Muncie has purchased the former Chessie System Railway (CSX) right-of-way from Richmond to Muncie. This property is being developed as a rails-to-trails project. The trail begins just north of the 3rd Street depot in Richmond and runs through Webster, Williamsburg and Economy. It leaves the county along US 35 northwest of Economy continuing through Losantville, Blountsville and Muncie to Marion.

COMMUNICATION TOWERS AND FACILITIES

As of April 1, 2016 there were 87 communication tower sites with associated support facilities in Richmond and Wayne County. These facilities serve the Indiana State Police, Richmond Police Department, Richmond Fire Department, Reid Hospital, Norfolk Southern Railway, radio and television stations, cable television, telephones, cellular phones, pagers and amateur radio.

Following is a listing of these towers with a numerical reference to assist in locating them on the Resource Inventory Council utilities map. No privately owned non commercial radio or television antenna towers are included. Private business towers are not included.

1. Verizon, tower, North A between 9th and 10th Streets, Richmond (**Dismantled**)
2. Reid Hospital, 1100 Reid Parkway, no tower
3. Richmond Police Department, tower (Guyed), 50 SW 11th Street, between W. Main St and SW A St., Richmond (Clear Creek Park)

4. AT&T Midwest, free standing 148' cellular tower with two equipment buildings, 3575 E. Main Street, Richmond, Wayne Township
5. Trinity Broadcasting Network, WKOI TV 43, tower, 1702 S 9th Street, Richmond
6. Earlham College, WECL radio tower (Guyed), 1405 Abington Pike, Wayne Township
7. Insight Communications (Comcast), tower, four satellite receiving dishes, one service building, Section 7, 1875 Test Road, Wayne Township
8. WKBV/WFMG radio tower, 2301 W. Main Street, Richmond, Wayne Township
9. WHON/WQLK, five towers, 500' main tower and office building, 2626 Tingler Road, Webster Township
10. IU East, WCTV tower, 2325 Chester Blvd, Richmond
11. Tower Communications Midwest LLC, 300' tower (Guyed), 12' x 16' service building, 2001 Hawkins Road, Richmond
12. Centennial Randolph Cellular Corporation, free standing 300' tower, 2460 Reservoir Road, north of I-70, Section 23, Wayne Township
13. Verizon, 285' tower, free standing, triangular antenna site, 2161 US 35 N, Wayne Township
14. AT&T Midwest PCS Network, monopole tower with service building, 1421 N Round Barn Road, Center Township
15. Duke, 150' tower, 4632 Gates Road, west of Round Barn Road, Section 16, Center Township
16. Verizon Services, 285' tower, free-standing, 3587 US 27 S, south of Liberty Avenue, section 20, Boston Township
17. Centennial Communications Company, 300' tower, two antenna positions, 2604 Pottershop Road, Abington Township
18. Beep Alert of Indiana (Richmond Communication Company), 340' tower, two dish antennas, (north tower – guyed) with service building, 4953 Merkamp Road, north of Tice Road, Section 7, Abington Township
19. Beep Alert of Indiana (Richmond Communication Company), 380' tower, (south tower – guyed), three service buildings, one dish antenna, 5047 Merkamp Road, north of Tice Road, Section 7, Abington Township
20. Tech Electronics, (Gary Green), communications tower, free-standing, 140' tri-leg radio tower, 3161 Mattie Harris Road, Center Township
21. American Tower 190' 3 sided free standing tower, 199 Woodpecker Rd, Hagerstown
22. Unisite, Inc (American Tower)., 250' tower, 2250 West Grove Road, Section 12, Center Township

23. Indiana Cable TVLP, 50' cable television tower, service building, four satellite dish antennas, 6869 US 27 N, New Garden Township
24. MWI Cablesystems, Inc., 50' cable television tower, three satellite dish antennas, 8674 US 35, Green Township **(Dismantled)**
25. Country Cable Systems, 70' cable television tower, two satellite dish antennas, service building, 4390 Carlos Road, Greens Fork, Clay Township **(Dismantled)**
26. Verizon Mobilnet, 285' cellular communications tower, two service buildings, 13253 Frontage Road, Harrison Township
27. AT&T, 250' cellular communications tower, free-standing, service building, 1540 N Germantown Road, Harrison Township
28. Insight Communications (Comcast), 200' tower, three satellite dish antennas, 1301 Brick Church Road, Jackson Township **(Dismantled)**
29. AT&T Midwest. 250' tower, service building, 16791 Bear Creek Road, Jefferson Township
30. Indiana State Police, tower, (guyed), west, 15583 Massey Road, Dalton Township
31. Norfolk Southern Railway, 240' tower, east, four sided, free-standing, five round antennas, service building, 15575 Massey Road, Dalton Township
32. Sprint, 300' cellular tower, triangular, service building, 2516 Union Pike, Wayne Township
33. Wayne County Highway Department/Sheriff's Department radio tower, 8198 US 40 W, Centerville, Share with New Lisbon Broadband & Communications, LLC
34. Richmond Fire Department, tower, South A and 5th Street, Richmond
35. SBA, 250' self-supporting wireless communication tower, multi-tenant, open service shelter, 1590 N. Germantown Road, Harrison Township
36. Unisite, Inc.(American Tower), 250' wireless communication tower, free-standing, triangular, two antenna sites, service building, 8853 Garrett Road, Center Township
37. Richmond Power and Light, tower, 6216 Hodgin Road, Wayne Township
38. Lattice Communications LLC, 300' tower, free-standing, triangular, three service buildings, 4628 Gates Road, Center Township
39. Network Towers Inc., 250' communication tower, free-standing, service building, 3989 W Pleasant Plain Road, Webster Township
40. Sprint (UBIQUITEL PCS), 280' self-supporting communication tower, 4716 Holtsclaw Road, Washington Township
41. Sprint (UBIQUITEL PCS), 395' telecommunications tower, (Guyed), service building, 5451 St Rd 121, Richmond, Wayne Township
42. American Tower Corporation, 250' self-supporting telecommunications tower, 3211 Cart Road, Richmond, Wayne Township

43. Sprint, C/O CIS Communications, LLC, 300' self-supporting telecommunications tower, service building, 1551 North Cambridge Road, Jackson Township
44. Unisite, cellular tower, free-standing, two antenna positions, painted orange/white, 2147 US 35 N, Wayne Township
45. AT & T Wireless Services LLC, 190' monopole, three sectors antenna array, 3060 Whitewater Road, Franklin Township
46. AT & T Wireless Services LLC, 190' monopole, three sectors antenna array, 4' microwave dish, 4862 US 27 North, Wayne Township
47. Sprint (UBIQUITEL), 250' cellular tower, 731 S Salisbury Road, Wayne Township
48. Perfect Wireless, 185' cellular tower, monopole, 12' x 20' utility building, 240 NW E Street, Richmond, Wayne Township
49. New Lisbon Broadband & Communications, LLC, 100' free-standing wireless service tower, 8727 College Corner Road, Centerville, Center Township
50. New Lisbon Broadband & Communications, LLC, 145' free-standing radio tower for high speed internet service, 9814 Swoveland Road, Clay Township
51. American Electric Power, 191' guyed meteorological tower, 11982 Arba Pike, Franklin Township **(Dismantled)**
52. New Lisbon Broadband & Communications, LLC, behind house, 3396 Webster Road, Webster Township
53. New Lisbon Broadband & Communications, LLC, 50' free standing wireless service tower, 117 S Market St, located adjacent to Firehouse, Economy, Perry Township
54. New Lisbon Broadband & Communications, LLC, 275' tower, 17012 Hoover Rd, Jefferson Township
55. New Lisbon Broadband & Communications, LLC, 114 Pearl St, mounted on roof of Greens Fork Fire Station
56. Richmond Industrial Group LLC, 160' monopole, cell phone tower, service building, 625 N 22nd Street, Richmond
57. New Lisbon Broadband & Communications, LLC, mounted on water tower, Nettle Creek I-70 Industrial Park
58. New Lisbon Broadband & Communications, LLC, on elevator leg, 6903 SR 227 S at Union County Line Road, Boston Township
59. New Lisbon Broadband & Communications, LLC, (on cell phone tower) 818 McMinn Road, Centerville, Center Township
60. Verizon Wireless, 290' self-supporting wireless communication tower, 5' lightning rod, 2424 Davis Meyers Road, New Garden Township
61. New Lisbon Broadband & Communications, LLC, (on elevator leg), Harvestland, 4379 N Jacksonburg Road, Jefferson Township

62. New Lisbon Broadband & Communications, LLC, on silo, 13000 block of W. E. Oler Road at Olive Branch Road, Perry Township
63. New Lisbon Broadband & Communications, LLC, (on elevator leg), Harvestland Co-op, 7481 S Germantown Road, Jackson Township
64. New Lisbon Broadband & Communications, LLC, (on elevator leg), 6512 N US 27, at Pleasant Plain Road, New Garden Township,
65. New Lisbon Broadband & Communications, LLC, (on elevator leg) 6289 Sugar Grove Road, at Fox Road, Clay Township
66. New Lisbon Broadband & Communications, LLC, on grain elevator, 8401 W. E. Oler Road, Perry Township (from Website-maybe Manning Rd need to locate)
67. New Lisbon Broadband & Communications, LLC, 70' tower, 12483 Charles Road, Perry Township
68. New Lisbon Broadband & Communications, LLC, on silo, 6957 Philomath Road, Abington Township
69. New Lisbon Broadband & Communications, LLC, 8894 Black Road, Center Township
70. New Lisbon Broadband & Communications, LLC, 2000 N Mineral Springs Road, Harrison Township
71. New Lisbon Broadband & Communications, LLC, 11785 Williamson Road, Perry Township
72. New Lisbon Broadband & Communications, LLC, on Harvestore tower, 10709 Dalton Road
73. New Lisbon Broadband & Communications, LLC (Private residence TV tower) 16914 Massey Road
74. New Lisbon Broadband & Communications, LLC, 3825 Washington Road, Clay Township
75. PCS-WIN, on Losantville/Modoc water tower, between 9083 and 9323 County Road 900 S, Randolph County ½ mile west of SR 1
76. New Lisbon Broadband & Communications, LLC, on elevator leg, 10211 US 35, East of Economy, Perry Township
77. New Lisbon Broadband & Communications, LLC, on elevator leg, 674 N State Line Road
78. New Lisbon Broadband & Communications, LLC, Tower, 2022 E Old SR 122, Boston Township
79. Tower, 5885 Pitts Road, on a silo north of Webster, Webster Township
80. New Lisbon Broadband & Communications, LLC, on elevator leg, Crete Inc., 8452 S Arba Pike, Lynn, IN.

81. New Lisbon Broadband & Communications, LLC Tower, 2270 N County Road 900 E in Henry County
82. New Lisbon Broadband & Communications, LLC tower, (Harvestore silo) 7589 Ruby Road
83. New Lisbon Broadband & Communications, LLC tower, 8441 N Centerville Road
84. Capital Telecom 270' free standing wireless communication, 13928 US 35
85. New Lisbon Broadband & Communications, LLC Tower 140' free standing 1049 Mineral Springs Rd
86. Verizon Wireless 160' monopole cell tower, 480 W Eaton Pike
87. Verizon Wireless 150' monopole cell tower, 1305 S 8th
88. Verizon Wireless (Capitol Towers) 250' self supporting three legged tower 621 Boundary St, Cambridge City
89. Capitol Telecom 175' monopole cell tower 2535 Chester Blvd
90. New Lisbon Broadband & Communications, LLC tower, grain silo on Rusk farm 10072 Colvin Rd, Washington Twp
91. New Lisbon Broadband & Communications, LLC tower, on water on Milton St in Dublin
92. New Lisbon Broadband & Communications, LLC tower, grain silo, 10406 Elliott Rd Franklin Twp
93. Integrity Metals Tower 170' 3 sided free standing tower, 650 N 8th St
94. Norfolk Southern RR 70' single pole tower. E of SR 1 and S of RR
95. Norfolk Southern RR 70' single pole tower. W of Jacksonburg Rd S of RR
96. Jefferson Township VFD 3 sided free standing tower, 151 N Plum St
97. Taylor Heating and Air 60' free standing tower 169 W South Market St, Hagerstown
98. R P & L Equipment on 325' Smoke Stack, 2100 S US 27
99. Boston Township VFD 65' free standing tower, 102 S SR 227(Salem St) Boston
100. Richmond Airport 36' Tower on North end of NE Runway, 5169 S SR 227
101. Lafuse Farms Inc. 67' free standing tower, 4229 Old SR 122
102. Norfolk Southern RR, King Rd Need Data
103. Norfolk Southern RR, Sowers Rd Need Data
104. Norfolk Southern RR Sugar Grove Rd Need Data

- 105.** Norfolk Southern RR, N 15th St 2 towers Need Data
- 106.** Norfolk Southern RR, Elks Country Club Rd 2 towers Need Data
- 107.** Norfolk Southern RR, NW 11th St & NW L St 2 towers
- 108.** Verizon Wireless on top of Leland Hotel (Lamplight Inn) 900 S A St

IV. NARRATIVE-WATER RESOURCES

To get the data for determining water availability, all the water and oil well drill data available was plotted on a Wayne County map (may be seen in County Planning Office).

Each hole is shown as .

The data by each hole shows:

1. Elevation above sea level.
2. Depth of well.
3. Depth bedrock was encountered (if any).
4. Depth aquifer (water bearing sand and gravel) was struck if bedrock was not.
5. Static water level in pipe.

Pumping data:

B - indicates bail test (numeral indicates times as: 1 hour).

P - indicates pump test and time

Second figure is gallons per minute.

Third figure shows water level in pipe after test or "draw down".

NOTE: With the exception of a few municipal water supply wells (evident by pumping volume figures) most residential and farm wells are 6 inches in diameter or less with an average of about 4 1/2 inches.

NOTE: Data is no longer updated on the RIC map. For current information, go to www.in.gov/dnr/water/3595.htm to access water well record database.

IVa. NARRATIVE - WATER AVAILABILITY

This map shows a general availability analysis based on well drill data. Areas are delineated where chances for finding water are:

1. Excellent
2. Good
3. Fair
4. Poor
5. Very Poor
6. None

It should be noted that there are always exceptions. It is possible that cracks or cavities bearing water may be found in bedrock areas. The likelihood is very slim and the supply very limited.

IVb. NARRATIVE - WATER QUALITY - GREAT AND LITTLE MIAMI RIVER BASINS

Additional information on water quality in Wayne County is available from the United States Geological Survey Water Quality Assessment Program for the Great and Little Miami River Basins. Wayne County lies at the west side of this basin.

A description of the basins including surface water, population and land use, physical characteristics, climate, ground water and the water supply is in USGS Fact Sheet FS-117-97. This publication is accompanied by a series of eight maps showing the location of the basins, surface geology, land use, locations of public and non-public water supplies, hydro geomorphic regions and bedrock geology.

This information is available at the USGS website: <http://www-oh.er.usgs.gov/miam.html>

IVc. NARRATIVE – WATER STORAGE FACILITIES IN WAYNE COUNTY

1. Town of Dublin
2. Town of Cambridge City
3. Town of Milton
4. Indiana Gateway Industrial Park
5. Town of Hagerstown
6. Hagerstown Industrial Park
7. Town of Centerville
8. Indiana American Water Company Tower, US 40 and Round Barn Road
9. Richmond, Indiana American Water Co. Tower, Williamsburg Pike and Industries Road
10. Richmond, Indiana American Water Co. Tower, East Highland Road
11. Town of Fountain City
12. Richmond, Indiana American Water Co. Middlefork Reservoir

V. NARRATIVE – GENERAL GEOLOGIC FEATURES

This map shows the following areas:

1. Muck, clay and silt over gravel.
2. Silt, sand gravel, flat floodplains of stream bottoms.
3. Sand and gravel, flat terraces along valleys and as isolated hills and ridges on uplands.
4. Glacial till: Moraine, gently rolling upland areas.
5. 1.5 feet to 4 feet silt over glacial till: Moraine.
6. Glacial till, flat upland surfaces and valley slopes.
7. Mixed sand, gravel and glacial till, 0 feet to 10 feet thick over limestone and shale
....Bedrock.
8. Silurian dolomite limestone.
9. Ordovician limestone and shale.

Valley sides and flat upland surfaces - significant ice - marginal position by stratigraphic or topographic break.

THE GEOLOGY OF WAYNE COUNTY, INDIANA

Bedrock

The bedrock exposed extensively in valleys in the southeastern part of the county is mostly of Ordovician age (about 4.23 million years). These strata are the type reference beds for rocks of this age for the continent of North America. The local rocks, deposited in an ancient Ordovician inland sea, are among the most fossiliferous to be found anywhere in the world. Professional paleontologists and amateur collectors have for years, and still do, come to this area regularly to collect and study the fossils. The general region of southeastern Indiana and southwestern Ohio, where these rocks are exposed, has been the source of a very high percentage of the country's professional paleontologists and geologists in the last one hundred and fifty years. Childhood fascination with the abundant and well-preserved fossils of this area directed them into these professions. Minor amounts of younger Silurian bedrock occur in a few places in the eastern part of the county.

Glacial Geology

The continental ice sheets that spread down from Canada several times during the last million years covered all but the south-central part of Indiana. Most of the landscape of Wayne County and surrounding areas is directly the result of past glacial conditions. Most of our major streams were formed by glacial meltwater. The Whitewater Gorge through Richmond was cut by a great flood of meltwater about 18,000 years ago when the last glacier melted out of this area. Rolling hill areas in the southern and northern parts of the county (moraines) mark stationary stands of former ice margins. Flat, upland areas (as between Richmond and Centerville) are areas, which the glaciers passed over smoothly. Closed depressions with peat bogs (kettles) resulted from the eventual melting of large blocks of glacial ice that were buried in glacial rock debris (near Cambridge City, north of Centerville, and elsewhere). And, of course, the rich agricultural soils of Wayne County are developed in the rock debris spread over the surface by the glaciers.

Most of the landscape features typical of glaciated regions can be found in Wayne County, although many are being destroyed.

Also, because the drainages of the Whitewater system have cut deep valleys in this area, the layers of glacial and interglacial deposits formed during the last million years are exposed for study at many places. Wayne, Union, Fayette and Franklin counties have provided some of the most complete records to be found anywhere in the state of the detailed history of the glacial age. These records give the history not only of this locality, but also for the entire continent of North America.

During the summer of 1965, a group of foreign geologists conducted a field trip of the glaciated Midwest, starting at St. Louis and ending in Toronto, Canada. Three days were spent in each of the following states: Illinois, Indiana, Kentucky, Ohio and Ontario. Half of the Indiana portion of the trip was spent in the vicinity of Richmond studying the detailed glacial history recorded here. Each year, several college and university groups come to this area to be shown the glacial geology, as well as to study and collect fossils.

A large amount of scientific research on the local geology has been published in many of the scientific journals.

Prepared by Dr. Ansel Gooding

THE SOILS OF WAYNE COUNTY, INDIANA

Most soils of Wayne County are derived from mixtures of limestone, shale and crystalline rock materials that were scraped up and crumbled by continental glaciers and deposited 15,000 to 20,000 years ago. The glacial deposit, known as "glacial till", in Wayne County, is a nearly ideal mixture of sand, silt and clay particles, well supplied with mineral plant nutrients. When the glacier was melting away, great floods of water flowed south-southeastward across the county and formed the valleys of the East and West Forks of the Whitewater River and their several tributary streams. The glacial floodwaters deposited sheets of gravel, sand and silt along the stream courses, and these sediments were later weathered to form good soils. Since glacial times the Whitewater and its tributaries have cut floodplains into the gravel beds, leaving the latter as a series of nearly level river terraces. The present floodplains have interbedded layers of sand, silt and clay, which make excellent soils, and they continue to receive silty sediments washed from cultivated fields of the uplands.

Soils of Wayne County were mapped by scientists of the United States Department of Agriculture and the Purdue Agricultural Experiment Station in 1923, and the map and soil descriptions were published in 1930. More detailed maps of individual farms are now being made in connection with the cooperative federal-state soil conservation program, with local headquarters in Richmond.

On the basis of the older published soil map we can recognize the following important soil areas:

I. Soils of the tilled uplands

- A. Miami silt loam, a naturally well drained soil of the rolling uplands along the major stream courses. The largest areas are (1) in the more or less hilly southeastern quarter of the county; (2) along the West Fork of the Whitewater; and (3) in narrow bands on either side of the Martindale Creek, Greens Fork and Noland's Fork. Many small patches of dark Brookston silty clay loam lie in formerly swampy depressions within areas of Miami silt loam; and shallow stony Fairmount silty clay loam soil lies on limestone-shale outcrops in and south of Richmond.
- B. A complicated pattern of naturally poorly drained soils follows all the broad, gently undulating divides between the major streams. Most of these poorly drained soils have been drained artificially by ditch and tile lines totaling many hundreds of miles in length. The Crosby and Bethel silt loams are naturally light

colored and acid in reaction; and the Brookston silty clay loam is rich in dark organic matter and nearly neutral in reaction. Practically all of it has been drained and is very productive. The "Boston Plain" in southeastern Boston Township has a large proportion of Brookston silty clay loam. Farmers have drained this land and it has become one of Indiana's finest small areas of agricultural land.

- C. Russell and Fincastle silt loams are, respectively, much like Miami and Crosby silt loams, except that upper layers of each are developed from wind-laid silt. They occur in the uplands of southern Washington and Abington townships.

II. Soils of the gravelly river terraces

- A. Fox loam and Fox silt loam are the most extensive soils of the river terraces. They are somewhat acid in reaction but respond well to lime and fertilizer and have the advantage of being both naturally well drained and level. Wet depressions on the river terraces have dark colored, organic rich Westland and Abington silty clay loams, practically all of which have been drained artificially and are very productive. The large areas of the terrace soils are on the West Fork of Whitewater and Martindale Creek in Washington, Jackson and Harrison townships, and in narrower strips along Greens Fork, Nolands Fork and East Fork rivers.

III. Soils of the floodplains

- A. The Genessee and Eel soils are on the floodplains of the major streams. They are very fertile and easily cultivated, but have the disadvantage of being subject to occasional floods.

All arable soils of Wayne County respond to commercial fertilizers and the light-colored soils of the uplands and terraces are benefited by applications of lime at suitable intervals. Erosion is most active on Miami and Russell soils and much of the original topsoil and part of the subsoil have been lost. Fortunately, it is possible to rebuild many areas of eroded soils by the use of fertilizers, manures and the application of good conservation practices.

Following are approximate percentages of the major soils of Wayne County:

Miami soils	32.6%	Other soils	6.0%
Crosby soils	21.9%	Abington soils	3.9%
Fox soils	15.8%	Russell soils	2.3%
Genessee soils	9.0%	Eel soils	1.1%
Brookston soils	7.0%	Westland soils	0.5%

Generally speaking, Wayne County is richly endowed with soils, some of which are intrinsically fertile and easily managed, and others that require careful management and constant vigilance in order to maintain a good state of productivity. Erosion is a continuing hazard on the sloping uplands, especially on Miami and Russell soils. Much of the steeper land of soils of these types should be forested and fenced to keep out livestock. Managed forest could provide modest income from such land over an indefinite long period of time. Conservation practices on less steeply sloping areas provide for long periods of agricultural use. Much remains to be done in the effort to provide for future stability of agriculture in Wayne County. The present trends seem to be in the right direction.

Prepared by James Thorp

VI. NARRATIVE - DEPTH TO BEDROCK

The "Depth to Bedrock" overlay was done by plotting on the Wayne County Base Map all of the well drill and seismograph data available from the Indiana Department of Natural Resources plus Dr. Ansel Gooding's collections and all other sources.

From this work map, an overlay showing the Depth to Bedrock was made showing the bedrock outcroppings, followed by isopach lines (lines connecting points of equal thickness), at intervals of: 0-10, 10-20, 20-50, 50-100, 100-200, 200-300, 300-400, 400 and over.

Via. NARRATIVE - BEDROCK ELEVATION

In case such information is needed, another overlay, number VIa., shows contour lines of the elevation above sea level of the surface of the bedrock contour intervals which are 50 feet.

To get the depth at any given point, this contour figure may be subtracted from the surface contour line as shown on the Standard U.S. Geologic Contour Map.

VII. - NARRATIVE - LAND USE - GROUND COVER

The overlays entitled "Land Use - Ground Cover" and "Land Use - Development" represent the existing land use for Wayne County, Indiana. Before beginning the explanation of the land use classifications, the method of determining land use should be discussed. United States Geological Survey quadrangle sheets were used as base maps for the land use field survey. The county was divided into eight sections with a two-man team driving all roads in each section to physically survey each and every parcel of ground. A second team conducted a similar survey in the towns and communities. This information was then plotted on the overlays at USGS level II classification, with aerial photos used as a final check on the location and size of the various uses.

The "Ground Cover" overlay represents natural features and agricultural areas of the county. Gravel pits and quarries locations are shown, but no manmade structural features are included.

GROUND COVER CLASSIFICATIONS

<u>Cropland and Pasture</u>	Land use to produce crops such as corn, hay, oats or wheat, and land used as pasture.
<u>Forest - Hardwood</u>	Lands that are at least 10% stocked by deciduous trees capable of producing timber or other wood products. Species include oak, hickory, maple, walnut and others.
<u>Forest - Evergreen</u>	Same general criteria as hardwood forests, except composed of pine, spruce, fir and other coniferous species
<u>Orchard</u>	Includes areas used for fruit production, nurseries, sod farms and other horticulture operations over 10 acres in size.
<u>Wetlands</u>	Seasonally or permanently flooded wetlands and marshes without forest cover, and over 10 acres in size.
<u>Gravel Pits and Quarries</u>	Includes those areas where gravel pits, stone quarries and mining operations have operated or are currently active.
<u>Inactive</u>	Inactive land without natural cover such as brush, which could curtail its ready use for agriculture and farmsteads.
<u>Richmond Municipal Facility</u>	Represents parks, golf courses and other large facilities owned and operated by the City of Richmond.
<u>Strip and Cluster Development</u>	Includes the corporate areas of all cities and towns within Wayne County.

VIIa. NARRATIVE - LAND USE - DEVELOPMENT

The "development" overlay represents the approximate placement of all manmade structures and features. Gravel pits, quarries and land fills are included in the group also.

DEVELOPMENT CLASSIFICATIONS

<u>Single Family Dwelling</u>	One family homes, whether an agricultural homestead or one of many in a subdivision, are mapped on this overlay.
<u>Multi-family Dwelling</u>	Those structures containing two or more dwelling units. The number by the symbol represents the total number of dwelling units.
<u>Mobile Home</u>	Refers to all single-family mobile homes placed on individual parcels of land.
<u>Mobile Home Park</u>	A tract of land with facilities accommodating three or more mobile homes. The number by the symbol represents the total number of mobile homes.
<u>Major Farm Building</u>	A sizable structure used for farming and related purposes - i.e., barns, large sheds.
<u>Confined Feeding Operation</u>	Specialized livestock production enterprises, including beef cattle feed lots, poultry farms, hog farms and fur-bearing animal farms.
<u>Commercial</u>	Areas used for the sale of products and services; includes associated parking areas.
<u>Industrial</u>	Light and heavy manufacturing, industrial parks and associated warehouses, storage yards, labs and parking areas.
<u>Transportation, Substation</u>	Airports, public parking structures, air, bus and rail terminals, gas, electric and telecommunications installations.
<u>School</u>	Educational facilities including public, private and colleges.
<u>Church</u>	Those buildings and associated areas used for religious worship and activities.
<u>Cemetery</u>	Includes all cemeteries, regardless of size, ownership or apparent condition. Symbol refers to general location not the size of the cemetery.
<u>Hospital</u>	Refers to buildings where in-patient facilities are available.
<u>Recreation</u>	Includes all parks, campgrounds, golf courses, private club facilities and all other recreation areas.
<u>Municipal and Service Organization</u>	Municipal facilities includes town halls, fire and police stations, county courthouses, water works, sewage treatment plants and other similar facilities. Service organization refers to the structures and facilities of private and service clubs.

<u>Gravel Pits and Quarries</u>	Includes those areas where gravel pits, stone quarries and mining operations. Those operations currently active are so indicated by the word "active" near the symbol.
<u>Strip and Cluster Development</u>	Covers the corporate areas of all cities and towns as well as large development with a high density factor - i.e. large subdivisions with more than three lots per acre and large strip commercial areas.

In viewing the overlays the thought should be kept in mind that every attempt was made to obtain accurate locations. However, due to the scale, the placement of the structures may be generalized.

During the survey a count was made of the number of housing units and a structural condition survey was made for each structure. Although not part of the land-use overlays, this information is available from Region IX Development Commission, Connersville, Indiana. This information is available for the rural areas and all towns in Wayne County except Richmond.

VIII. NARRATIVE - NATURAL AREAS

A
SURVEY AND REPORT
ON THE
NATURAL AREAS
OF
WAYNE COUNTY, INDIANA

FIRST PREPARED IN 1966
REVISED AND UPDATED IN 2002
REVISED AND UPDATED IN 2016

Preface to the 1993 Revision

The words "natural area" became popular as descriptive terminology following the publication of Alton Lindsay's, *Natural Areas in Indiana and their Preservation*, 1968. Lindsay and others found it to be a useful expression to describe, in layman terms, a portion of publicly or privately owned land, which uniquely displays an assortment of geologic and biotic features typical of the region. In naming a natural area the presence of rare or endangered species or some distinct expression of geology gives added credence to the need for preservation.

This is the first substantive revision of the list, narratives and map since 1976. The work contains a few corrections. With time a few sites, such as Elliott's Mills Bog, have become very degraded by intrusions of man. Fortunately a few additions replace the deletions. The 1993 Narratives of Natural Areas will be edited and printed from a word processing program and stored on hard disk for later revisions.

James Joyner
Biology, Retired
Richmond Sr. High School
Richmond, Indiana

ECOLOGY OF WAYNE COUNTY

Ecology is a term that is derived from Greek, meaning a study of the home. Biologists who have paid particular attention to the relationships of living things to each other and to their environment have come to recognize that, if natural conditions prevail, certain predictable complexes of plants and animals will exist in a given area. Ecology is defined as the relation of living things to each other and to their environment.

When considering the relationship of plants and animals to the environment, it is convenient to break the environment into several variable factors. There are several physical factors that come to bear on an organism. Among the most important are light, heat, moisture, air, soil and topography. If one of these factors is present in a small amount, it becomes a limiting factor and does much to determine the kind of natural community that can exist there. For instance, the desert community is defined on the basis of less than ten inches of rainfall per year. The cold severe winters (lack of heat) are responsible for pine and spruce forests in the north. Thus heat is a limiting factor. We all know from personal experience that there are not usually sharp changes in the physical factors of the environment. There are always areas where one natural community seems to be grading off into another. Into each natural community is fitted a group of plants and animals which are adapted to the environment as it exists at any certain place over a period of years.

Physical factors do not control the natural community completely. There is also the effect of the living things on each other. A highly complex arrangement of interrelationships may be involved. A fanciful, but none-the-less true, example is found in the statement that the number of widows in a community has a direct effect on the amount of clover seed produced. The reason is explained as follows: widows like to keep cats, cats eat mice, mice eat and rob bumblebees, and bumblebees pollinate clover. Therefore, if there are numerous cats to eat mice, there will be a larger bee population to pollinate clover!

The rich glacial soil spread across a variety of topographical features, combined with the prevailing sunlight, heat, and some forty inches of rainfall, brings together a set of conditions where forests of certain species of deciduous trees form the natural community. These temperate deciduous forests covered most of the United States east of the Mississippi. The classical form of the temperate deciduous forest found in Wayne County is the beech-maple forest community. This community, so named because of the high percentage of beech and sugar maple in the tree population, is found only in Indiana, Ohio and lower Michigan. In contrast to most ecological communities, the beech-maple community has existed in our region for a relatively short time.

With the retreat of the last glacier some ten to twenty thousand years ago, there began a reoccupation of the raw land surface by plants from more southern regions. This reoccupation of newly uncovered regions was no haphazard affair. Instead, there appeared an ordered sequence of plant communities. First came the lichens and mosses, capable of existing on rock and raw sub-soil. These were followed by communities of slightly larger plants such as ferns, herbs, and small shrubs. These shrub communities gave way in turn to a series of forest communities. First appeared the hemlock-pine community, then the oak-hickory, and finally the beech-maple climax community.

This beech-maple community, the last link in the succession chain, is a highly structured, self-perpetuating ecological unit. It is organized in four main stories or layers. The top layer, the canopy, is composed of the large crown trees: tulip, ash, black gum, elm, walnut, wild cherry, hackberry, oak, hickory and, of course, beech and maple. The next layer, the understory, is made up of young trees of the canopy layer together with permanent understory species such as redbud, dogwood, ironwood, blue beech, buckeye, etc. The third layer contains very young trees, and such shrubs as greenbrier, elderberry, spicebush, prickly ash, etc. The ground layer, or herb layer, is composed of the beautiful spring wild flowers such as spring beauty, trillium, adder's tongue, violets, bloodroot, jack-in-the-pulpit, wild ginger, may apple and many, many others. The members of each layer are highly adapted to the amount of light normal to their particular layer. Thus the herb layer is highly tolerant to light reduction necessary to their survival. In such a community the young seedlings of the canopy species are generally highly shade-tolerant, and thus are nourished in the shade of the tall adults until they too become canopy members.

The animal life of this community is adjusted, as to population and species, to the plant life. The animal herbivores of the community are the leaf eating insects, and the seed eating squirrels, chipmunks, mice, etc. The carnivores include the insect eating warblers, vireos, and woodpeckers, and the rodent eating hawks and owls.

Left alone, the beech-maple community will perpetuate itself indefinitely, cycling energy and essential materials through the system replacing the plant and animal individuals, rebuilding the soil nutrients. When, however, the canopy is opened to light penetration through heavy logging of the crown trees, disaster results. Exposed to the increased amount of light, the more shade loving members of the understory dwindle and die. This exposes the herb layer to still more light, and the highly shade tolerant wildflowers vanish. Thus the forest dies or is so radically altered as to have little resemblance to the original beech-maple community. When such a catastrophe strikes, the succession of plant communities must begin again. The area returns to weed and shrub, followed by stands of low value trees. Finally, after many decades, the beech-maple climax community will return.

In Wayne County, our beech-maple forest has been either destroyed or highly altered. In a few locations there exist remnants of relatively high quality. It should be our concern to protect and nurse back to full recovery these remnants. If this is done, Wayne County can maintain for its future citizens a few localities, which can be mirrors of Indiana in its natural wild beauty.

Prepared by James Joyner and Von Alexander
1963

BOTANICAL FEATURES OF WAYNE COUNTY

Botanically speaking, Wayne County, Indiana is rich in plants; particularly spring flowering and woody plants. To give some idea of the kinds, we know that there are about 750 species of herbaceous and woody plants, exclusive of algae, fungi, and mosses. These species belong to about 375 genera and represent about 80 families of higher plants. Of the approximate 175 woody plants in the state of Indiana, we have most of these in the county, and at Sedgwick's Rock Preserve sixty percent of all woody plants found in the county are present. In the county as a whole there are more species of woody plants than in all of Europe. The following may indicate some of the possible factors responsible for our riches:

1. Wayne County is about midway north and south in the state of Indiana, and we have some typically southern species and some more typically northern species as well as the species common to the state.
2. The geology and soils history and present topography are varied, and have doubtless influenced the flora, particularly in relating to certain "pockets", "relic communities" and rather special plants favoring limestone areas.
3. The temperature-rainfall patterns of this area seem to have been particularly favorable in promoting unusually rich spring flora in our woodlands, rich in total numbers of individuals and rich in number of species.

Because of the factors listed above there are many relatively small areas today where plants should be conserved or preserved, and if these are areas that are too small there may be even a greater danger of being gobbled up or eliminated by bulldozers. Some areas are too small for effective use in terms of public recreation or park areas, but should be preserved if possible in their natural state, and hence used primarily for educational or research projects. Other somewhat larger areas could effectively be opened, with some restrictions, to more public use.

It may be of some significance to note that in a few cases certain areas are known as the only stand for certain species of plants in the county, or of plants considered quite rare in the state or even in the entire Midwest. I have listed below a few of the relatively rare species and areas where they are still known to exist.

Prepared by: Carrolle A. Markle. (1963)

1. Deciduous-leaved Holly (*Ilex verticillata*) - Old Center Bog.
2. Shingle Oak (*Quercus imbricaria*) - Hill's pasture on New Paris Pike and Wood Duck Pond.
3. Shadbush or Downy Serviceberry (*Amelanchier arborea*) - Duning's Woods and Wildman Farm.
4. Partridge Berry (*Mitchella repens*) - Wildman Farm and Sedgwick's Rock.
5. Shooting Star (*Dodecatheon meadia*) - Glen Miller Park.
6. Fringed Gentian (*Gentiana crinita*) - Clear Creek.
7. Shrubby Cinquefoil (*Potentilla fruticosa*) - Clear Creek.
8. Blue Cohosh (*Caulophyllum thalictroides*) - Blue Clay Falls.

9. American Columbo (*Swertia caroliniensis*) - Blue Clay Falls.
10. Grass of Parnassus (*Parnassia glauca*) - Clear Creek.
11. Pennywort (*Obolaria virginica*) - Duning's Woods.
12. Black Cohosh (*Cimicifuga racemosa*) - Sedgwick's Rock.
13. Kentucky Viburnum (*Viburnum molle*) - Viburnum Woods. (1993)

Species present in 1963 but now lost due to the continuing drainage of the agricultural fields once part of the Elliott's Mills Bog wetland:

1. New Jersey Tea (*Ceanothus americanus*) - Elliott's Mills Bog.

THE WATERS OF WAYNE COUNTY

Wayne County is blessed with resources in abundance! We have fertile lands, beauty in great amounts, and yearly rainfall equal to a million gallons for each man, woman, and child living in the county.

Much of the rain that falls rushes off the land to the river. When it rains hard, the crop fields, grasslands, and woodlands cannot soak up all the water. The excess water runs down hill to the river. It frequently carries with it soil from the farmer's crop fields, and if storms are severe enough, destructive floods result.

In an inventory of areas with potential for enjoyment of natural beauty and natural phenomena, the effects of water must be considered.

There are three kinds of water areas to consider: rivers, man-made water impoundments, and natural impoundments.

Wayne County has approximately 125 miles of rivers. There are also several miles of small creeks. We use rivers and the areas along their banks for fishing, hunting, riverside camping, picnicking and walking. Of natural interest are fish, plants, birds, animals, and geological formations.

What then are the problems that occur along rivers?

Floods are the main cause of damage to natural values. Run off water from crop fields carries into the streams soil particles and agricultural chemicals (fertilizer, herbicides, and insecticides). Fish suffer considerably from soil pollution. Effects of farm chemicals on water users have not been determined at this time. The beauty of clear sparkling streams is appreciated by everyone. Muddy waters appeal to no one, and flooding rivers spread out to many times normal width dropping soil particles (mud) which cover walking, picnicking and camping areas.

Not all of this damage must be allowed to happen. Flood prevention and watershed protection programs can be installed which will have considerable beneficial effect. They are locally planned and supervised, and they depend upon considerable citizen involvement.

Watershed projects start with "land treatment" of the watershed. Farmers are assisted with conservation planning and given technical help with installation of needed conservation practices. Some of the practices used are grassed waterways, ponds, woodland protection, improvement and planting, terracing, strip cropping, contour crop rows and many other practices.

When conservation measures are installed on a large percentage of the farms, even heavy rains will move more slowly from the lands as relatively clear water.

More water will soak into the soil. This recharges springs that are then able to run all year, instead of just a few months in the spring. Rivers fed by these springs flow fuller in the summer when nature badly needs the water.

Even with full conservation development of the farms in the watershed, there will still be floods. Construction of a number of earth dams across the rivers to retard floods will be needed to stem the floods.

Studies have shown a system of flood prevention dams will have greater dollar benefits than they will cost.

Wildlife, woodland, fish, plants, and users of nature areas will benefit greatly from flood prevention. Protection of potential riverside recreation areas from flooding will make it possible to safely give a greater degree of development. There will be a wide, open field for walkways and "walk-in" areas along our streams.

If river flow is increased during dry periods, pollution materials are further diluted and are less serious problems. Proper dilution of effluent from city sewage disposal plants depends on the amount of stream flow. This becomes critical during the summer months. It is important that we install conservation measures that will help provide low flow augmentation water.

Natural impoundments of interest to nature enthusiasts are mostly bogs and old drainage ways cut by a river and then left as the river moved to a new channel. Many of the bogs were formed by the glaciers.

Water to supply bogs, swamps and other natural areas comes from rainfall. The better the job of conservation farming, the more water will be available to these areas.

One of the pressing problems with preservation of natural impoundments is that of informing the landowner of the value of his wetland holding to nature. It is often his desire to drain the area and use it for crops. He can no longer secure government help, either technical or financial. Instead he will be advised of the special value of his swamp or bog.

Man-made water impoundments are of great importance in recreation and wildlife considerations. In Wayne County there are more than 300 ponds, lakes and reservoirs. They vary in size from the largest (Middlefork Reservoir) to some only a few hundred square feet in size.

These small ponds are of considerable value to birds and wild animals. The larger ponds (and even some of the smaller) serve migrating waterfowl. The water and the small, developed areas around them serve many recreation needs such as fishing, picnicking, camping, or just "watching".

In summary, users of land and water resources (urbanites) must accept the responsibility of working with resource managers (farmers) in developing and carrying out a program for preserving and developing all our natural resources.

Prepared by Jack Hart, 1963

CATALOG OF NATURAL AREAS OF WAYNE COUNTY

Two cumulative lists of natural areas are provided. The first is by alphabetical arrangement, and the second is by area type (e.g. woods, bogs, river corridors, etc.). These are followed by individual descriptions of each natural area, also arranged in alphabetical order.

Each descriptive page carries the following information:

Name or title of the area.

Township and size of area.

Main Interest: The major biological or geological factors, which characterize the area (e.g. bog, mixed woodland, beech-maple forest, etc.)

Location: For most areas location will be given in terms which will permit location on USGS quadrangle maps; quarter of section (e.g. SW1/4), section number (e.g. S32), township (e.g. T18N), and range (e.g. R14E). Hence a complete location might read - SW 1/4, S32, T18N, R14E. Alternatively locations, particularly in Wayne Township, may be given in relation to roads as noted on Wayne County Highway Department Maps.

Access: Giving nearest roads by name from Wayne County Highway Department maps.

Comments: Specific details of biological, geological, archeological, or historical interest.

Suggested Uses: Recommendations for future use of the area based on long-term interests of county residents. The suggested uses are, of course, contingent upon the cooperation of the landowners.

Priority Recommendations: Using the following rating scheme:

- (1) An area of unusual significance! Every effort should be made to utilize the area in the manner indicated.
- (2) An area of definite value. The suggested use should be followed if at all possible.
- (3) An area of value or significance that has been damaged or altered to such an extent that preservation or use as a natural area is questionable. Such areas should be examined and evaluated carefully as future utilization is contemplated.

ALPHABETICAL LISTING OF NATURAL AREAS OF WAYNE COUNTY

Beelor Hill Bluffs
Big Rock Woods
Blue Clay Falls
Boston Creek, Cream Run and White Brook Area
Botsford Bog
Capital Hill Park and Cemetery
Centerville Road Bogs and Woods
Clear Creek Fens
Conservation Park Area
Cope Environmental Center
Cox's Mill and Leslie Cook Woods
Duning's Woods Area
Elkhorn Falls Area
Elliott's Mills Bog
Fred Mitchell Woods
Friends United Meeting, Audubon Society and SPUR Bird Sanctuary
George Davis Farm - Greens Fork Floodplain
Glacial Kame
Greenville Treaty Line Burr Oak
Hagerstown Nature Preserve
Hayes Arboretum
Highest Point in Indiana
Hoff Woods
Laughlin Woods
Lewis Woods
Lumpkin Woods
Old Center Bog
Reller Woods Area
Schroeder's Woods
Sedgwick's Rock Preserve
Shingle Oak Trees
Smoker Woods Area
Spring Fed Swamp - Hayes Arboretum
SPUR Whitewater Gorge Preserve
Stream Corridors
Clear Creek-Lick Creek Corridor
East Fork Corridor
Elkhorn Creek Corridor
Greens Fork Corridor
Nolands Fork Corridor
West, East and Middle Forks of the East Fork Corridor
West Fork Corridor
Swallow Road Woods
Thistlethwaite Falls
Viburnum Woods
Wapi-nipi State Nature Preserve
Whitewater Canal Feeder Dam
Wildman Woods
Wood Duck-Teal Ponds

LISTING OF NATURAL AREAS OF WAYNE COUNTY BY TYPE

WOODLANDS

Beelor Hill Bluffs
Big Rock Woods
Blue Clay Falls
Boston Creek, Cream Run, and White Brook Area
Conservation Park Area
Cope Environmental Center
Cox's Mill and Leslie Cook Woods
Duning's Woods Area
Fred Mitchell Woods
Friends United Meeting, Audubon
Society and SPUR Bird Sanctuary
George Davis Farm - Greens Fork
Hayes Arboretum
Hoff Woods
Laughlin Woods
Lewis Woods
Lumpkin Woods
Reller Woods Area
Schroeder's Woods
Sedgwick's Rock Preserve
Smoker Woods Area
SPUR Whitewater Gorge Preserve
Swallow Road Woods
Viburnum Woods
Wapi-nipi State Nature Preserve
Wildman Woods

WETLANDS

Botsford Bog Capital Hill Park and Cemetery
Centerville Road Bogs and Woods
Clear Creek Fens
Elliott's Mills Bog
Hagerstown Nature Preserve
Old Center Bog
Spring Fed Swamp
Wood Duck-Teal Ponds

GEOLOGICAL AREAS

Blue Clay Falls
Botsford Bog
Centerville Road Bogs and Woods
Elkhorn Falls
Glacial Kame
Highest Point in Indiana
Old Center Bog
Sedgwick's Rock Preserve
SPUR Whitewater Gorge Preserve
Thistlethwaite Falls

STREAM CORRIDORS

Clear Creek-Lick Creek Corridor
East Fork Corridor

Elkhorn Creek Corridor
Greens Fork Corridor
Noland's Fork Corridor
West, East and Middle Forks of the East Fork Corridor
West Fork Corridor

HISTORICAL SITES

Capital Hill Park and Cemetery
Cox's Mill
Elkhorn Falls Area
Greenville Treaty Line Burr Oak
Shingle Oak Trees
Whitewater Canal Feeder Dam Site

DELETED SITES- 1993

<u>NAME</u>	<u>REASON</u>
George Goble Woods	Degraded
Greens Fork Floodplain	Inappropriate
Marsh Area north of Penn Central	Degraded
Marsh-Heiser Station Road	Renamed Wood Duck-Teal Ponds
Pole Creek Woods	Degraded
Wood Duck Pond	Incorrectly Mapped

The Board of Directors of the Wayne County Resource Inventory Council wants all persons interested in viewing the following Natural Areas to be aware that most of those listed are private property. Do not trespass. Investigate ownership and seek permission before entering.

Exceptions are: Capitol Hill Park and Cemetery
Conservation Park
Whitewater Gorge

BEELOR HILL BLUFFS

Approximately 100 acres - Wayne and Boston Townships

- Main Interest: Excellent north facing hillside forest; good bird, wildflower and deer territory.
- Location: N Edge, Sect. 19, T13N, R1W.
- Access: On the west side of Liberty Ave. at the base of Beelor Hill, 3 miles S. of Test Rd. intersection.
- Details: Extreme southern end of Earlham Farms, plus adjacent wooded lands. This moist woodland is rather hilly, with high bluffs along south side of river, intersected by streams running north to river and eroding deeply into underlying rock. Glacial deposit overlays limestone bedrock. Contains both high land flora and fauna and that of flood plain. Excellent mature walnuts, oaks, basswood and other trees typical of mixed woodland, that attract many warblers in spring.
- Suggested Uses: Preservation as a scientific and recreational area with hiking trails and river canoeing.
- Recommendations: No. 1 priority. Owned by Earlham College and is designed to be preserved.

BIG ROCK WOODS

Approximately 7 acres - Wayne Township

<u>Main Interest:</u>	Mixed mature woodland on north facing slope.
<u>Location:</u>	NE 1/4, Sec. 12, T13N, R2W.
<u>Access:</u>	From the SW I Ct. cul de sac (Hidden Valley) go due south (house at 1871 SW I Ct. faces north).
<u>Details:</u>	Unusually fine small forest with extensive spring wildflowers. The area contains one of the few known stands of snow trillium in Wayne County. There is also the remains of an Indian mound, which was excavated by Joseph Moore of Earlham College. The area is named for a large glacial erratic boulder located in Lick Creek, which lies at the foot of the north facing slope.
<u>Suggested Uses:</u>	The area should be preserved for educational and recreational uses.
<u>Recommendations:</u>	No. 1 priority.
<u>Comment:</u>	Has been designated as a "Classified Forest" since 1949.

BLUE CLAY FALLS

Approximately 40 acres - Center Township

- Main Interest: Falls and fossils in attractive setting. Small stream flowing over Ordovician limestone bedrock which consists of fossiliferous rock layers interbedded with blue clay.
- Location: Sect. 23, T13N, R2W.
- Access: South side of Hunt Road, southwest of Richmond.
- Details: Wide drainage cut through to Ordovician bedrock, creating a stream valley with steep banks and small falls, and exposing several strata of fossils. Attractive vegetation, including scouring rushes. This area should include adjacent mature woodlands to the southeast and the wooded hillside on the north side of Hunt Road.
- Suggested Uses: The area is suitable for a county park and natural area of biological and geological interest.
- Recommendations: No. 1 priority. Preservation for supervised educational and scientific fossil collecting and for picnicking and recreational uses.

BOSTON CREEK, CREAM RUN AND WHITE BROOK AREA

200 plus acres - Boston Township

- Main Interest: Large wooded tract of mixed hardwoods.
- Location: SE 1/4, Sec. 31; SW 1/4, Sec. 32; T13N, T1W, and NE 1/4, Sec. 6; NW 1/4, Sec. 5; T12N, R1W.
- Access: Off Esteb Rd. about 1/2 mile S. of Endsley Rd. Enter the Sedgwick's Rock Preserve and proceed southeast upstream along Boston Creek, or one of its tributary streams.
- Details: Most of this large wooded tract is in the natural state with little or no evidence of cutting. It is dry, steeply sloping valleysides of the three small streams for which it is named. Excellent wildflower, bird, and native mammal habitat.
- Suggested Uses: This area would be an excellent extension of Sedgwick's Rock Preserve. Hence, it is suggested primarily for scientific and educational purposes. Some portions might be effectively developed for hiking or nature trails.
- Recommendations: No. 1 priority

BOTSFORD BOG

Approximately 75 acres - Center Township

- Main Interest: Bog of geological and biological interest.
- Location: NW 1/4, Sec. 8, T14N, R14E.
- Access: Just south of I-70 and one-fourth mile east of the Centerville Road.
- Details: This is a glacial kettle of 75 acres. A pollen profile was taken which shows 20,000 years of vegetative succession. Flora and fauna is typical of bog habitat.
- Suggested Uses: Of main interest to geological and biological study groups. This bog should be preserved as a typical representative of this rare habitat in Wayne County.
- Recommendations: No. 1 priority.
- Comment: As of 1993, drained but remains wooded and would still contain pollen profiles.

CAPITAL HILL PARK AND CEMETERY

Approximately 8 acres - Jackson Township

- Main Interest: Cemetery of early pioneers and surrounding area, which has been capably developed by Cambridge Wildlife Restoration Club.
- Location: In southeast corner of Cambridge City.
- Details: From the center of this 8 acre area a wooded hill falls away eastward ending in a swamp (glacial pothole). In the area is a possible glacial large boulder with large grooves, a well-drained forest, buttonbush in swamp, a small meadow area, large variety of wildlife, and virgin maple and beech trees. Shrubs and flowering plants are being replaced by the Club.
- Suggested Uses: Since this whole area has been restored and improved with a trail through different habitats, replanting and replacing destroyed native flora, the Cambridge Wildlife Restoration Club plans to make this a conservation and nature study area for all groups interested in the conservation of renewable natural resources. It is suggested that the area be preserved because it is a rare spot of land of great value, due to the old trees and its potential contribution to future outdoor education.
- Recommendations: No. 1 priority.

CENTERVILLE ROAD BOGS AND WOODS

Approximately 100 acres - Center Township

Main Interest: Glacial bogs and woods.

Location: NE 1/4, Sect. 6; SE 1/4 Sec. 31; T14N; R14E.

Access: From Centerville Road and just SW of Norfolk- Southern tracks

Details: This area is made up of several farms covering 3/4 x 1/3 miles. The land is rolling with several swampy areas and evidence of glacial deposit stones and glacial kettles, medium and wet forest, and stream running through. Abundant plant and wildlife indigenous to type area. Particularly notable are quantities of white violets in stream valley.

Suggested Uses: Preservation for typical bog and marsh habitats.

Recommendations: No. 2 priority.

CLEAR CREEK FENS

Approximately 20 acres Wayne Township

Main Interest: Scattered calcareous seeps and fens within a young mesic forest.

Location: Sec. 7, T13N, R1W

Access: From the intersection of Salisbury Rd. and Test Rd. go about 3/4 miles east. Trail, on the west side of Clear Creek Bridge, leads north to the general area.

Details: Fens are spring-fed marshy areas which support an assortment of native hydrophyte plants.

Suggested Uses: Preserve for scientific observations and study.

Recommendations: Inform owners of need to protect. Entered in the list of Resource Inventory Council Natural Areas in 1993.

CONSERVATION PARK AREA

40 plus acres - Wayne Township

Main Interest: An attractive wooded area that should be considered as an addition to Conservation park.

Location: NW 1/4, Sec. 29; T14N, R1W.

Access: Enter Conservation Park from Richmond's Waterfall Rd.

Details: Includes the West Fork of the East Fork Corridor and its adjoining bluffs on the west side north of the Waterfall Road. Nearby, across the road south, are the Thistlethwaite Falls and the privately owned Horseshoe Lake. The latter has long been a site for collecting hydra, the freshwater coelenterate.

Suggested Uses: Addition to Conservation Park for future recreational area.

Recommendations: No. 1 priority.

COPE ENVIRONMENTAL CENTER

Approximately 102 Acres- Center Township

<u>Main Interest:</u>	Cope Environmental Center promotes the sustainable use of the earth's resources through education, demonstration, and research.
<u>Location:</u>	
<u>Access:</u>	1792 Airport Road is the Prairie wood Entrance for viewing wetlands, native prairie and for trail access. 4910 Shoemaker Road is the Homestead Entrance for the education center, administration building, and for trail access.
<u>Details:</u>	Over 100 acres of natural and developed wildlife habitats including Wetland, ponds, wooded ravines, and a native Indiana prairie. The Jim Cope Conifer Trail features 55 species of pines, spruces, Larches, and firs from around the world. Over three miles of hiking Adult, child, and group environmental education programs are Available during all seasons and on weekends.
<u>Suggested Uses:</u>	Excellent for nature study, sustainability study, hiking, adult, child, and group environmental education programs.
<u>Recommendations:</u>	Hours: 9:00 - 5:00 - Education Center and Administration Building Dawn - to - Dusk – Trailheads and four Unique Trails Contact: 765-855-3188 or www.CopeEnvironmental.org

COX'S MILL AND LESLIE COOK WOODS

Approximately 80 acres - Wayne Township

Main Interest: Mixed woodland, millrace and restored site of old mill.

Location: NW 1/4, Sec. 12, T14N, R1W.

Access: The mill, now a residence, is on the east side of Rt. 227 1/4 mile north of Middleboro. The woods are best reached 3/4 mile northeast on the Hollansburg Rd., on the west side.

Details: Southeast sloping woodlands extend onto the floodplain of the Middle Fork of the East Fork Corridor. The remnants of the millrace, which diverted water to Cox's Mill, may be seen. The stream waters flow over limestone bedrock. This exposure of bedrock is quarried about a mile north of the woods.

Suggested Uses: Significant as a historical site.

Recommendations: No. 1 priority. Whole area of considerable historic and aesthetic value.

DUNING'S WOODS AREA

Approximately 90 acres - Center Township

<u>Main Interest:</u>	Extensive hardwood forest and pine planting.
<u>Location:</u>	S/W 1/4, Sec. 33; SE 1/4 Sect. 32; NE 1/4, Sec. 5; NW 1/4; Sect. 4; T13N; R14 E.
<u>Access:</u>	Located 1-3/4 miles south of Rt. 40 on Airport Road. Accessible also from Mattie Harris Road, Study Road, and Shoemaker Road.
<u>Details:</u>	This is the largest single wooded tract in Wayne County, comprised of land under several ownerships. It is a very interesting area, including a variety of sites; wet, medium and dry woods; glacial till deeply incised with streams; it is hilly with steep slopes; and contains wide variety of birds and animals, including: flying squirrels, raccoons and foxes, whippoorwills, owls in pines, nesting woodcock, as well as the common species; and valuable complex of plants hard to duplicate.
<u>Suggested Uses:</u>	Preserve in natural state for education-scientific purposes and/or develop with hiking trails.
<u>Recommendations:</u>	No. 1 priority.
<u>Comment:</u>	<p>In 1990 the marketable timber was cut from the 80 acres owned by Nancy Hoff but reforestation by Mike Hoff and others continues to make the whole area a high priority.</p> <p>This area is now a state designated nature preserve (2005) owned and managed by Whitewater Valley Land Trust. It is also a part of the Lick Creek Hills complex of Nature Preserves. This area consists of the following:</p> <p><u>Dunning Woods Nature Preserve:</u> 121 acre mostly old growth ravine forest with extremely high “floristic quality index”</p> <p><u>Bolling Woods Nature Preserve:</u> Mostly ravine forest 91 acre site including 15 acre rolling pasture well advanced in natural succession (50+ years).</p> <p><u>Neff Woods Nature Preserve:</u> Mostly ravine forest including 15 acre 1993 reforestation project, 64 acres in all.</p> <p><u>Lick Creek Summit Nature Preserve:</u> Glacial moraine, all forested, with several unique microclimates and boasting nearly 400 species of flora and extremely high “floristic quality index”, 39 acres.</p>

ELKHORN FALLS AREA

50 plus acres - Boston Township

Main Interest:

Ordovician fossils, falls and valley. International reference site type locality of Elkhorn formation.

Location:

W 1/2, Sec. 22, T 13N, R1W.

Access:

Directly downstream of the Elkhorn Creek Bridge on Rt. 127 (Boston Pike) 2 miles southeast of Richmond.

Details:

This is a rolling area. The type site for the Elkhorn formation of the Upper Ordovician. It serves as an international reference site. The falls and lower valley is a typical example of falls advance and lower valley erosion effect. The vegetation and wildlife are typical of rocky cliffs, small wooded areas, meadows and stream margins. The area is also of historical interest as an early settlement and mill location.

Suggested Uses:

Area should be preserved and opened to study groups under controlled conditions. Area has been closed in the past, and possibly still is. A site to which reference is made in geological writings throughout the world should be preserved and made accessible.

Recommendations:

No. 1 priority. The area should be in public ownership and preserved as a park and a site of major geological and historical significance.

ELLIOTT'S MILLS BOG

Approximately 80 acres - Wayne Township

- Main Interest: Extensive bog area with many typical bog plant species.
- Location: NE - 1/4 Sec. 11, T13N, R1W
- Access: From Garwood Road, south of Hodgin Road.
- Details: This large bog area was originally one of the best examples of this type of habitat in Wayne County. In recent years, however, planned drainage has reduced the water level and has seriously altered the area. Its continuous significance as a bog habitat is thus in question.
- Suggested Use: If drainage could be stopped the area might revert successfully to a bog habitat. If so, preservation would be recommended.
- Recommendations: No. 3 priority.
- Comment: This area was gradually drained for agriculture. With proper management this could revert to a bog habitat. There still are a few plants characteristic of a bog. An effort should be made to inform owners of the importance of the area.

FRED MITCHELL WOODS

Approximately 40 acres - Franklin Township

- Main Interest: This is a well-managed classified woodlot, with contrast of grazed woodlot adjacent. Shows good example of well managed and poorly managed woods conveniently side by side.
- Location: SW 1/4, Sect. 14, T15N, R1W.
- Access: Located about one (1) mile north of Whitewater on Rt. 227, west side of road.
- Details: Flat land, Cosby and Brookston soils, forest is medium to wet. Excellent stand of mixed hardwoods. Usual birds and animals with croplands, as well as nesting sites and cover available.
- Suggested Uses: As study for forestry, nature and conservation and good and bad woodland management.
- Recommendations: No. 2 priority.

FRIENDS UNITED MEETING, AUDUBON SOCIETY AND SPUR BIRD SANCTUARY

Approximately 20 acres - Wayne Township.

- Main Interest: This is being managed by the Audubon society as a bird sanctuary.
- Location: SE 1/4, Sec. 29, T14N, R1W.
- Access: From Friends United Meeting facilities off Waterfall Road.
- Details: Special plantings of trees and shrubs have been made to provide cover and food for native birds. The habitats vary from floodplain, brush, to wooded hillsides. Walking paths provide easy access.
- Suggested Uses: The area should continue under the management of the Audubon society, with the cooperation of the owners, Friends United Meeting and SPUR.
- Recommendations: No. 1 priority.
- Comment: In 1993 there is not an active Audubon Society in Richmond. The sanctuary is in a neglected state. All marketable timber has been sold.

GEORGE DAVIS FARM - GREENS FORK FLOODPLAIN

Green Township

Main Interest: Flood plain of Greens Fork Creek. Over two miles of stream through wooded pasture.

Location: Located north of Williamsburg on Centerville North Road.

Details: Unpolluted stream. Heavily, but not overgrazed woodlots. Indigenous wildlife and plants. Migratory water and land birds. Butternut and pawpaw trees.

Suggested Uses: Considered wise choice on preliminary plan for a county park.

Recommendations: No. 1 priority.

GLACIAL KAME

5 acres - Boston Township

Main Interest:

Large glacial kame of geological significance.

Location:

NE 1/4, Sec. 30, T13N, R1W.

Access:

Woods Road leading west from U.S. Rt. 27.

Details:

This is the largest glacial kame in the region. It is well wooded. A portion of the southwest side has been used for removing gravel in the past. The kame is located on the Klemperer farm.

Suggested Use:

The kame and its wooded cover should be preserved as a natural feature of considerable geological interest.

Recommendations:

No. 1 priority.

GREENVILLE TREATY LINE BURR OAK

New Garden Township

Main Interest:

One of largest burr oaks known. Approximately 350 years old. On treaty line. 18' 4" in circumference, 5-6 feet in diameter.

Location:

Beside Boundary Rd. near the intersection with Overman Road.

Suggested Uses:

An area 20' x 20' should be fenced to protect roots, lightning arrestor needed. Cooperation of highway department and REMC needed to protect and preserve. Fountain City Lions may be interested in assisting.

Recommendations:

No. 1 priority.

HAGERSTOWN NATURE PRESERVE

Red-tail Conservancy's nature preserve includes 45 acres located in the southeast corner of Hagerstown on the north side of Teetor Road. It has creeks making up the other three property lines. The land is mostly seasonal wetland with some early succession woody growth on about 10 acres and around the perimeter. There is evidence that the original watercourse ran generally north and south through the middle of the preserve. There are areas of open water along this original course.

While there are stands of invasive, non-native grasses throughout, there remains quite a diverse flora community. There is a healthy mix of insects, butterflies, mammals, songbirds, water fowl, and hawks that make their home in the habitat provided.

Since this preserve is located on the edge of town, it will be a convenient field station for environmental projects and education. RTC has invited the staff of the Cope Environment Center to use the preserve as a study area for the Hagerstown school system.

HAYES ARBORETUM

Hayes Arboretum is a managed nature preserve with 385 acres located on the east side of Richmond bordering the north side of US 40 and an additional tract of land of 116 acres on the south east side of Richmond bordering State Route 227 with a southern boundary of Elkhorn Creek.

Hayes Arboretum has unique and diverse habitats represented on our properties. There exists a mature Beech-Maple Forest of approximately 60 acres. Few forest of this caliber remain, this Beech-Maple Forest is a remnant of what the early Indiana settlers found on much of this region's land. This 60-acre tract represents about 3% of all of the old growth forest remaining in the State of Indiana. We also have planted forest, open meadows, ponds, swamps, and streams. In addition to the natural areas there are collections of native woody plants, ferns, and herbs and prolific wildlife and insect populations.

Historically, there are points of interest including two Indian Mounds of the Adena and Hopewell era, an 1833 Post & Beam Barn that functions as our Nature Center, and the 1890 Richmond Race Track. (One-mile oval).

Visitors may enjoy several miles of hiking trails; a four-mile self guided driving tour, Hayes Museum, Nature Center, Butterfly House, and several other features. Our main entrance is 801 Elks Road, Richmond, IN and for additional information call (765) 962-3745 or visit our website at www.hayesarboretum.org

HIGHEST POINT IN INDIANA

Franklin Township

<u>Main Interest:</u>	As the highest point in the State.
<u>Location:</u>	NE 1/4, Sec. 3, T15N, R1W.
<u>Access:</u>	In the extreme northeast corner of Wayne Co. A few hundred feet west of Elliott Rd. and .4 miles south of Randolph County Line Rd.
<u>Details:</u>	Elevation of approximately 1257 feet above sea level.
<u>Suggested Uses:</u>	Marked and noted on a county scenic drive.
<u>Recommendations:</u>	No. 1 priority.
<u>Comment:</u>	<p>In 1993 the elevation site was marked and a fence stile was erected.</p> <p>Site renovated and marked by an Eagle Scout in 2005. New stone marker erected by RIC in 2013.</p>

HOFF WOODS

Approximately 300 acres - Boston Township

Main Interest: Large managed tree farm and adjacent beech-maple and oak-hickory forest.

Location: E 1/2, Sec. 29, T13N, R1W.

Access: West side of Straight Line Pike south of Leeds Road.

Details: In addition to the developed portion of this arboreal farm, the area contains over 100 acres of native beech-maple and oak-hickory woodlands. These contain excellent stands of wildflowers and typical indigenous vegetation.

Suggested Uses: The natural forested areas should be preserved in their present state for scientific and recreational uses. They are an interesting contrast to the managed portions of the farm. The farm itself should be of interest to area residents who are interested in land use.

Recommendations: No. 2 priority.

LAUGHLIN WOODS

50 plus acres - Boston Township

Main Interest: Stream and woods with rock outcropping and wooded slopes.

Location: SW 1/4, Sec. 21, T13N, R1W.

Access: From Straight Line Pike, east side, south of Farlow Road.

Details: This woods of about 50 acres contains a fine stream with interesting rock formations rich in fossils. Snakes and salamanders are abundant.

Suggested Uses: Preservation as a mixed woods in the natural state.

Recommendations: No. 2 priority.

LEWIS WOODS

80 acres - Green Township

Main Interest: Until recently was classic example of beech-maple woodland.

Location: SW 1/4, Sec. 8, T17N, R14E.

Access: One mile south of Williamsburg on the east side of Centerville Road North.

Details: Medium to moist woodland of 80 acres, with stream running through, containing all typical wildlife and plants indigenous to that type of ecological environment. Also the only location of hydrastis in state, and one of two places in Wayne County where narrow leaf spleenwort was found. The area thoroughly studied by Earlham College in the late 1950's before cutting. Should now be preserved for future study and control.

Suggested Uses: Before recent cutting over of beech and maple, this was the classic example beech and maple forest in our area, uncut and ungrazed for nearly 100 years. With proper care (no more cutting) can recover and quickly become valuable study area again.

Recommendations: No.1 priority area.

Comment: In 1993, great blue herons have established a heronry. It remains a very important study area.

LUMPKIN WOODS

Approximately 50 acres - Dalton Township

<u>Main Interest:</u>	Mixed hardwood forest managed for timber production.
<u>Location:</u>	Sect. 23, T18N, R12E.
<u>Access:</u>	On Route 1 north of Route 35.
<u>Details:</u>	Rolling to hilly hardwood forest with intermittent stream drainage. Part of northern Wayne County terminal moraine system. Good variety of typical dense woods animal and plant life with spice bush and several species of ferns and mosses.
<u>Suggested Uses:</u>	Preserved in natural state; educational-scientific purposes. Now being well managed.
<u>Recommendations:</u>	No. 2 priority.

OLD CENTER BOG

Approximately 80 acres - Green Township

Main Interest: Pond, bog and surrounding woods of geological and botanical interest.

Location: SW 1/4, Sec. 21, T18N, R14E.

Access: From east side of Center Road, north of Morgan Creek Road. Located north of old Center Cemetery.

Details: This area covers 75-80 acres with a glacial kettle 1/4 to 1/3 mile in diameter. The whole area is in an unspoiled condition and probably one of the best of its type in Wayne County. Contains only stand of deciduous holly known in Wayne County.

Suggested Uses: Interesting as a geological feature and excellent for nature study and botanical collecting.

Recommendations: No. 1 priority. Should be given high priority for preservation for scientific and educational purposes, with cooperation of owners.

OLD CENTER BOG

Approximately 80 acres - Green Township

Main Interest: Pond, bog and surrounding woods of geological and botanical interest.

Location: SW 1/4, Sec. 21, T18N, R14E.

Access: From east side of Center Road, north of Morgan Creek Road. Located north of old Center Cemetery.

Details: This area covers 75-80 acres with a glacial kettle 1/4 to 1/3 mile in diameter. The whole area is in an unspoiled condition and probably one of the best of its type in Wayne County. Contains only stand of deciduous holly known in Wayne County.

Suggested Uses: Interesting as a geological feature and excellent for nature study and botanical collecting.

Recommendations: No. 1 priority. Should be given high priority for preservation for scientific and educational purposes, with cooperation of owners.

RELLER WOODS AREA

Approximately 100 acres - Wayne Township

<u>Main Interest:</u>	Varied woodland with native trees, wildflowers and birds.
<u>Location:</u>	SE 1/4, Sect. 11; NE 1;4, Sec. 14; T13N, R1W.
<u>Access:</u>	SW from the intersection of Wernle Rd., Minneman Rd., and Garwood Rd.
<u>Details:</u>	This area is rolling and contains medium to dry woodlands in varying stages of succession; swamp and marsh areas; several deep gullies, one of which contains walking fern; abundant spring flowers; plant and animal life indigenous to each habitat; fringed gentian. Short Creek forms the north boundary of the property and other spring fed streams run from the hillside into the creek.
<u>Suggested Uses:</u>	Present owners intend to maintain the major portion of the area under preserve status. Useful as walking and perhaps study area.
<u>Recommendations:</u>	No. 2 priority. The area should be maintained as a preserve under natural conditions.

SCHROEDER'S WOODS

Approximately 120 acres - Washington Township

Main Interest: Mixed hardwoods forest.

Location: Sect. 3, T15N; R13E.

Access: End of Log Cabin Road.

Details: This woodland is predominantly beech and maple on very high land. There has been very little erosion in spite of high ground and a severe cut. Re-growth has been steady and ample. Adequate wildlife with cropland nearby.

Suggested Uses: Preservation as a typical beech-maple upland woodland area of Wayne County.

Recommendations: No.1 priority. Good study of regeneration if owner provides continued cooperation.

SEDGWICK'S ROCK PRESERVE

15 acres - Boston Township

- Main Interest: Fine, apparently virgin beech-maple climax forest, with oak-hickory forest on exposed southern slope.
- Location: Sect. 31 (center), T13N, R1W.
- Access: From the intersection of Endsley Rd. and Esteb Rd. go SW on Esteb Rd. about 1/2 the way up the hill and park on the downhill side of the road.
- Details: This is a unique and extremely valuable area of 15 acres now owned and preserved by Earlham College. It is rich in fossils and rare plants particularly ferns. It is mostly hilly with a permanent stream, springs, small waterfalls and a rock gorge. Contains an excellent example of tufa rock formation.
- Suggested Uses: Now being used as study area by the college and will be preserved by them as such. Should not be opened for public use under any circumstances.
- Recommendations: No. 1 priority.

SHINGLE OAK TREES

Approximately 1 acre - Wayne Township

- Main Interest: Last known shingle oak trees remaining in Wayne County.
- Location: SE 1/4, Sect. 28, T14N, R1W.
- Access: From the intersection of Ind. Rt. 227 and the New Paris Pike (Ind. Rt. 121) east to the first gully past the developed area on the north side of the road.
- Details: During the 19th century shingle oaks were cut extensively to provide shingles for buildings. These are the only remaining shingle oaks in Wayne County.
- Suggested Uses: The trees and surrounding area should be preserved and marked for historical and natural history interest.
- Recommendations: No. 1 priority.

SMOKER WOODS AND ADJACENT WOODLANDS

Approximately 150 acres - Abington Township

- Main Interest: Mixed woodland with particularly fine spring flowering plants.
- Location: NW 1/4, Sect. 16, T13N, R14E; and Wedge, Sect. 35, T13N, R2W.
- Access: From Abington Pike just west of Camp Clements. Located north of Abington.
- Details: This area is an extensive mixed woodland. It should include the steep wooded bank of 5 or more acres along the west side of Abington Pike just south of Camp Clements, which is covered by a beech-maple forest. It contains some rare spring flowers in addition to abundant common ones.
- Suggested Uses: This site could be fine wildlife area for use by Camp Clements.
- Recommendations: No. 1 priority. It is recommended that some arrangement for acquisition by Camp Clements be made, if possible.
- Comment: In 1993 this area is being developed and is somewhat degraded. Camp Clements mentioned in the narrative exists as a private area but is still recognizable as a landmark.

SPRING FED SWAMP-HAYES ARBORETUM

Wayne Township

Main Interest: Swamp and fresh water stream; spring fed therefore never runs dry.

Location: Sect. 35, T14N, R1W

Access: On the west side of Gravel Pit Rd. south of the railroad.

Details: Land is slightly rolling, underlain with gravel, was once pastured, but now "woodsing up". Contains typical plant and wildlife. Indian Mound located there.

Suggested Uses: Good study habitat for fresh water plants and animals. Now being used with permission, by Hayes Arboretum summer classes.

Recommendations: No. 1 priority. Include in conservation zone along with Hayes Arboretum.

Comment: In 1993, bordered on two sides by Hayes Arboretum and managed by it in agreement with the Indiana American Water Co., which has active wells in the area.

SPUR WHITEWATER GORGE PRESERVE

Approximately 30 acres - Wayne Township

- Main Interest: Floodplain and steep gorge hillsides of the East Fork of the Whitewater River.
- Location: NW 1/4, Sec. 8, T13N, R1W.
- Access: Parking lot on north side of Test Road, on west bank of the Whitewater River. Paved trail north to Veteran's Park. Open to the public.
- Details: This preserve contains typical riverbank, floodplain, and hillside vegetation and animal life. There are extensive walking trails which comprise the Millard Markle Memorial Trail and which connect to a trail leading north in the Gorge to G St. and the High School.
- Suggested Uses: Continued management as a preserve.
- Recommendations: No. 1 priority.

STREAM CORRIDORS

Anyone who has observed Wayne County from the air cannot help but have noticed the extensive green belts which are formed by our stream corridors. These corridors are extremely valuable as pathways for the movements and distribution of birds and larger mammals, particularly deer. They are also ideal sites for walking trails and, on the larger streams, for canoeing. Wayne County still boasts many dozens of miles of smallmouth bass water. These stream corridors represent a natural areas resource which should be protected from home and other building development and should be retained in the public domain for use and enjoyment of all county residents. It is strongly recommended that the following stream corridors be preserved in their natural states and that walking trails be developed along their banks wherever tenable.

SPECIFIC LISTING OF STREAM CORRIDORS:

<u>Clear Creek-Lick Creek Corridor</u>	U.S. 40 south to the East Fork of the Whitewater River.
<u>East Fork Valley Corridor</u>	Richmond to its confluence with the West Fork of the Whitewater in Brookville.
<u>Elkhorn Creek Corridor</u>	Elkhorn Falls to the East Fork of the Whitewater River.
<u>Greens Fork Corridor</u>	County line north to county line south.
<u>Nolands Fork Corridor</u>	Fountain City to county line south.
<u>West Fork, Middle Fork and East Fork of the East Fork Corridor</u>	From north and east where each enters the county to their confluence in Richmond.
<u>West Fork Valley Corridor</u>	Hagerstown to county line south.

Please note: From Brookville north, the Whitewater has two branches; namely, the West Fork and the East Fork. From Richmond north to their sources the East Fork has three more branches; namely, the East, Middle and West Forks.

SWALLOW ROAD WOODS

Approximately 100 acres - Harrison Township

<u>Main Interest:</u>	Especially nice hardwood forest.
<u>Location:</u>	E 1/2, Sect. 2, T16N, R13E.
<u>Access:</u>	From Swallow Road, 1/2 mile north of Rt. 40.
<u>Details:</u>	Hilly terrain of about 100 acres with typical woods, herbaceous plants, ferns and wildlife.
<u>Suggested Uses:</u>	Particularly good area for hiking and nature walks.
<u>Recommendations:</u>	No. 2 priority.

THISTLETHWAITE FALLS

Falls area by Waterfall Road Bridge in Richmond, Wayne County

<u>Main Interest:</u>	Unique cataract falls on the West Fork of the upper Whitewater River.
<u>Location:</u>	Sect. 29, T14N, R1W.
<u>Access:</u>	South of the West Fork Bridge on Waterfall Road
<u>Details:</u>	Water flows over thinly bedded Silurian limestone in the form of a cataract. Falls recede only as the whole slope of the rock face erodes away.
<u>Suggested Uses:</u>	Geological site for fossil collection.
<u>Recommendations:</u>	Make it a hiking trail stop as the valley corridor of trails and parks are developed. This site is included for the first time in the 1993 revision of the RIC list of Natural Areas.

WAPI-NIPI STATE NATURE PRESERVE

Located approximately 5 miles south of Richmond, it features a tall west facing cliff overlooking the Whitewater River with uplands and a high quality mixed deciduous forest. It consists of 114 acres. It is within the state Bicentennial Conservation area and is owned by the Whitewater Valley Land Trust.

WHITEWATER CANAL FEEDER DAM SITE

Approximately 40 acres - Washington Township

- Main Interest: Dam was built to provide water for Whitewater Canal.
- Location: Sect. 18, T15N, R13E.
- Access: From Indiana Rt. 1 via Interstate Road.
- Details: Site of the dam includes 40 acres of wet forest, swamp area, Whitewater River, flora and fauna typical of habitat. It is also of historic interest and value as a typical section of the Whitewater Canal.
- Suggested Uses: Restored as recreation area. Fishing, picnicking, camping and hiking were all available here in the past until recent years, when it was closed to the public. Suggest the purchase of additional land here to provide for the increased needs of the future. Restoration of the dam and the diversion channel would add much interest to the area. The area has an access road from Road 1 that could be improved at low cost. Additional camping and parking space could be well provided on high ground that joins the area.
- Recommendations: No. 1 priority. This area should be improved and developed as a county park.
- Comment: In 1993 this site is approachable by car with permission. Only dynamited remnants of the dam remain.

WILDMAN WOODS

40 acres in Center Township

- Main Interest: Undisturbed mixed forest of mature trees. Large assortment of spring flowers including large stands of Trillium grandiflora.
- Location: Sect. 33, T16N, R14E.
- Access: This property is surrounded on all 4 sides by other land holdings. It would be best to consult the Biology Department at Earlham College for directions.
- Details: Woods deeded in 1992 to Earlham College in memory of Professor Ernest Wildman.
- Suggested Use: Maintain as a preserve for scientific study.
- Recommendations: Because of its landlocked location and present ownership this area could remain as an undisturbed legacy of temperate deciduous forest. This site is included for the first time in the 1993 revision of the Resource Inventory Council's list of Natural Areas.

WOOD DUCK - TEAL PONDS

Washington Township

- Main Interest: Wood duck nesting area. Fairy shrimp and other aquatic life found only in a habitat that is a pond in winter and spring and dries in summer.
- Location: NW 1/4, Sect. 8, T15N, R13E.
- Access: 4 miles south of Rt. 40 on Heiser Station Road.
- Details: These are shallow wet weather ponds formed in glacial kettles, typical buttonwood ponds, containing fairy shrimp, etc., migrating wild ducks, and typical woodland and fringe birds and animals, willows and sycamores.
- Suggested Uses: Should be preserved as an example of an interesting and unique habitat for educational and scientific purposes.
- Recommendations: No. 1 priority. Accessibility at the present time is difficult. The owners should be contacted for possible cooperation.

VIBURNUM WOODS

Approximately 5 acres - Center Township

Main Interest: A local population of Kentucky viburnum (*Viburnum molle*).

Location: Sect. 24, T13N, R2W.

Access: From the intersection of Abington Pike and Salisbury Rd., go about 200 feet SW on Abington Pike. Enter the woods on the NW sector of the intersection.

Details: Hilly hardwood forest growing on glacial outwash ground.

Suggested Use: Owner should be informed of the rare species. Woodland is currently managed for timber.

Recommendations: Preserve in a natural state. Site listed in 1993.

MARSH AREA NORTH OF PENN-CENTRAL SWITCHING YARDS
(deleted site no. 1)

Approximately 20 acres - Wayne Township

Main Interest: Large bogs and marshlands.

Location: SE 1/4, Sect. 34, T14N, R1W.

Access: Located west of Elks Road and north of the Penn-Central switching yards.

Details: About 50% of area is bogs or marsh and other 50% is second growth bottom lands, also marshy. Contains muskrats, water snakes, redwing blackbirds, as well as other wildlife indigenous to wet areas. Formerly contained many "speckled lilies."

Suggested Uses: One of the few large swamps to Richmond. Good for study of this type of habitat. Not good for commercial use.

Recommendations: No. 3 priority. Value questionable as most of area has been greatly damaged or destroyed.

Comment: Deleted in 1993 from the original list.

GEORGE GOBLE WOODS
(deleted site no. 2)

12 acres - Webster Township

Main Interest: Woodland protected for many years by immediate former owner from cutting and grazing.

Location: SW 1/4, Sec. 16, T17N, R14E.

Access: Located on the south side of Helm Road, between King Road and Round Barn Road north.

Details: Approximately 12 acres of mixed woods on level ground. Has had botanical survey by Earlham students.

Suggested Uses: Maintain as a preserved woodland.

Recommendations: No. 2 priority.

Comment: Deleted in 1993.

GREENS FORK - FLOODPLAIN
(deleted site no. 3)

Approximately 40 acres - Green Township

Main Interest: Woods on floodplain.

Location: S 1/2, Sec. 13; T17N, R13E.

Access:

Details: One mile north of bridge over Greens Fork at Smoky Row Road. This area of 40 acres is cut badly by gullies caused by high water. It is a good area for birds and animals and trees indigenous to stream habitat.

Suggested Uses: Preservation as part of Greens Fork River corridor.

Recommendations: No. 2 priority.

Comment: Moved to the deleted list in 1993. Inappropriate as a natural area.

POLE CREEK WOODS
(deleted site no. 4)

11 acres - New Garden Township

Main Interest: Flood plain of Nolands Fork, Pole Creek, and Reel Run.

Location: SE 1/4, Sect. 25, T18N, R14E.

Access: Middle Road, 1-1/4 miles north of Fountain City, east side of road.

Details: Area of 11 acres is rolling to hilly with medium to dry forest, a 10-year old wildlife area with 6 acres on creek. Contains typical wildlife and plants.

Suggested Uses: Although now chiefly pasture, could be beautiful and planted to trees.

Recommendations: No. 2 priority.

Comment: Deleted in 1993.

IX. NARRATIVE - HISTORY

Archeological evidence indicates that Wayne County was only sparsely and temporarily populated until the 19th century. Several Indian tribes used the area for hunting, trapping and fishing. David Hoover, a surveyor by training, and four friends came westward from West Milton, Ohio, and found the Whitewater River in 1805. They met a group of men who had come up from Kentucky to the region of Elkhorn Creek. Both groups realized the potential for mills along the natural waterways, farms on the flatlands and bedrock for building material.

Other families, especially Quakers from North Carolina, followed the Hoover group, and other southern families followed the Kentucky group.

The first courthouse was a log house built in 1811 in the town of Salisbury. Centerville was platted in 1814 and Richmond in 1816. All three communities have been the seat of county business, but it currently is Richmond.

The National Register of Historic Places is a program of the U.S. Department of the Interior. It is the official inventory of districts, sites, buildings, structures and objects significant in U.S. history, architecture, archeology, and culture. Properties of local, state, regional and national significance are included. Each state is responsible for implementing the program through the State Historic Preservation Officer. The Indiana State Historic Preservation Office is in the Department of Natural Resources.

At present (1995) Wayne County has six Historic Districts on the National Register and twenty individual buildings.

The historic districts are as follows:

<u>Cambridge City Historic District</u>	Roughly bounded by Boundary, Maple, High and Fourth Streets.
<u>Centerville Historic District</u>	Bounded by Corporation Line, Third and South Streets and Willow Grove Road.
<u>East Main Street-Glen Miller Park Historic District</u>	Both sides of East Main street from 18th to 30th Streets and Glen Miller Park East of 30th Street.
<u>Old Richmond Historic District</u>	Bounded by C & O Railroad tracks, South 11th and South A Streets and the alley south of South E Street.
<u>Reeveston Place</u>	Bounded by S. B, S. E, S. 16 th , and S. 23 rd Sts.
<u>Richmond Downtown Historic District</u>	Roughly Main St. between 7 th and 10 th Sts. and N. 8 th St. between Main and A Sts.
<u>Richmond Railroad Station Historic District</u>	Roughly bounded by Norfolk & Southern railroad tracks, North 10th Street, Elm Place, North D Street and Fort Wayne Avenue.
<u>Starr Historic District</u>	Roughly bounded by North 16th, E and A Streets, and alley west of North 10th Street.

Individual buildings on the register are as follows:

1. Beechwood, Isaac Kinsey House, south of Milton
2. Bethel A.M.E. Church, Richmond
3. Mary Birdsall House, Richmond

4. Levi Coffin House, Fountain City
5. Conklin House, Cambridge City
6. David Worth Dennis House, Richmond
7. Doddridge Chapel and Cemetery, southwest of Centerville
8. Earlham College Observatory, Richmond
9. Forest Hills Country Club, Richmond
10. Abram Gaar House and Farm, Richmond
11. Henry and Alice Gennet House, Richmond
12. I.O.O.F. Hall , Hagerstown
13. Hicksite Friends Meetinghouse, (Wayne County Museum) Richmond
14. Huddleston Farmhouse Inn Museum, Mount Auburn
15. Lewis Jones House, Centerville
16. King-Dennis Farm, north of Centerville
17. Lackey-Overbeck House, Cambridge City
18. Leland Hotel, Richmond
19. Oliver P. Morton House, Centerville
20. Murray Theater, Richmond
21. Richmond High School, Richmond
22. Andrew F. Scott House, Richmond
23. Samuel G. Smith Farm, Richmond
24. John & Caroline Stonebraker, Hagerstown
25. Wayne County Courthouse, Richmond
26. Westcott Stock Farm, Centerville
27. Witt-Champe-Myers House, Dublin

Five historic markers should be noted:

1. The Madonna of the Trails in the southwest corner of Glen Miller Park, near East Main Street.
2. Mendenhall-Clay marker, 7th and North A Streets where a famous abolitionist petition was presented to Henry Clay in 1842. His rejoinder is credited with having

defeated him two years later as a candidate for the U.S. presidency.

3. A plaque at South 9th and E Streets locates the Wayne County Fairgrounds which was used as a mustering campground during the Civil War.
4. Greenville Treaty Line marker on the National Road (U.S. 40) west of Salisbury Road.
5. Twelve-Mile Purchase marker at north curb of U.S. 40 in Cambridge City, just east of railroad crossing.

The Greenville Treaty Line (1795) running from Fort Recovery on the Ohio Line east of Portland to the bank of the Ohio River opposite the mouth of the Kentucky River, opened the east one-third of what is now Wayne County to settlement in the early 1800s. This was just in time to welcome the Revolutionary War veterans and the Quakers fleeing from slavery in the Carolinas. The line enters Wayne County northeast of Fountain City and leaves at the west edge of Abington. The land east of this diagonal line was surveyed in 1797 and causes many irregularities in the Range and Township lines on both sides. A stone marker on the north side of U.S. 40, one-fourth mile west of Salisbury Road (west of Richmond) marks its location. The first county seat, one-half mile south of this crossing, was called Salisbury and gave the road its name. North of U.S. 40, starting just south of the West Main intersection and north to just above Northwest L Street, Salisbury Road follows this historic treaty line. North of I-70, Flatley Road follows the treaty line briefly and for about one and one-half miles the Boundary Road northeast of Fountain City also follows it. There are few other places through Indiana where roads follow this treaty line.

In 1811, another Indian treaty opened a strip (known as The Twelve-Mile Purchase). This line parallels the Greenville Treaty Line twelve miles to the west. It opened most of the balance of Wayne County to settlement. It enters the county between Dalton and Economy on the north, goes through the east part of Hagerstown, and the west edge of Cambridge City. The bronze plaque on a large glacial boulder marks its location at the north curb of U.S. 40 just east of the railroad crossing and where Old Route 1 went north. Paul Road, from a point opposite the marker, follows this treaty line for about one mile.

The Whitewater Canal, which extended up the west bank of the Whitewater River to Hagerstown is still easily visible in many places. It was built in the 1840s and played an important, though brief, role in the development of transportation in Wayne County and parts should be preserved. Later, a railroad was constructed on the tow path.

The National Road, built through Wayne County in the 1830s became one of the chief arteries for the settlement of the West.

Wayne County is divided into fifteen townships. Detailed information on each township is included in a packet of maps available at the Resource Inventory Council Office in the Wayne County Planning Department, County Administration Building, Richmond. See the Executive Director for more details.

Prepared by Robert Huff, c.1968
Revised by Gertrude L. Ward, 1995

WAYNE COUNTY BARN INVENTORY

This inventory includes over 600 barns dating back to 1810 featuring pin & tenon, mortise joints, and field stone foundations. These barns may be viewed by clicking on the dynamic map showing each site.

X. NARRATIVE - 1874 HISTORY

In order to justify the attention of Planning Officials, developers and builders, History Map IX included only sites where buildings of recognized importance are still standing. However, it seemed worthwhile to develop on a single map as much as possible of the distinguished history of Wayne County. The best source seemed to be an 1874 atlas recently republished by Historic Hagerstown, Inc. The township maps from this atlas were combined on one sheet that could be used as an overlay in the Wayne County Resource Inventory Council series, available to the public in the office of the Wayne County Planning Department. To this has been added archeological information, historic sites already registered and the location of stockades built for defense against the Indians.

NATURAL RESOURCES

The first white settlers to arrive at what is now Wayne County regarded it as a paradise. It provided all the essentials for establishing new homes:

- I. Water
 - A. Springs were numerous, but if not handy, shallow dug wells served their needs.
 - B. Clear streams were rapid enough for many water-powered mill sites and were full of fish.
- II. Hardwood forests were full of game and contained the materials for buildings, fencing, implements and ample fuel.
- III. Flat stones met many building needs and limestone could be burned to make lime for mortar.
- IV. Clay was available for bricks and tile.
- V. Gravel was plentiful for road building.
- VI. The deep humous soil of the forest was better than anything the settlers had ever seen before.

To conquer this wilderness and establish their new homes required unbelievable backbreaking labor. Fortunate was the pioneer who had several sons but mostly the first settlers helped each other. The land had to be cleared to produce crops for food. The first step was to girdle trees so they dropped their leaves and let the sunlight through. The actual clearing came later and what was not needed for buildings, fences, etc., was simply burned. It is easy for us to condemn our forefathers for stripping the land, but to them tillable soil was a matter of survival.

The Glacial Period of 20,000 years ago which covered Wayne County time after time with mile high ice dropped an ideal mixture of ground rock from which the rich soil was developed. The five (5) major streams or waterways which traverse the county in a southwesterly direction were established by the vast run off of the melting ice caps and the topography of the debris dropped by the glaciers. This tremendous volume of melt water, laden with sand and other grinding materials, cut the Whitewater Gorge in the limestone laid down while a warm shallow sea covered the region four (4) million years ago. This limestone provides the best outcrop of the Ordovician fossils to be found and the paleontologists from all over the world frequent the area to study and collect. This limestone is found in relatively thin layers interspersed with blue clay or marl. This made quarrying operations easy and much of the stone for foundations, chimneys, sidewalks and curbs was taken from the East Fork of the Whitewater River.

The quality of the soil, the climate and the abundant streams were very favorable to the development of the dense hardwood forests, which the pioneers found. These resources and the wildlife nurtured here attracted a race of people who lived here from 1000 BC to 700 AD. They have been called the "Woodland Society" and they disappeared as mysteriously as they came. However, the map shows the location of 112 sites of mounds they built (Ellen Stapleton Study for SPUR). Some were for burial grounds, while others were for living quarters, defense or ceremonial purposes. Relatively few are still visible and only five (5) are shown on map IX.

Later American Indians recognized the area for the game and fish supported by the forests and streams and it became a favorite hunting preserve. They practiced real conservation and came here only for the food they needed. Their closest villages were near Muncie, Indiana or Wapakoneta, Ohio. Most of the arrowheads and artifacts found in the area were from the "Woodland Society".

The Indians deeply resented the loss of a large portion of their "hunting ground" when their defeat by General Anthony Wayne (for whom the county was named), in 1795 forced them to sign the Greenville Treaty. This treaty line, shown on the map, enters Wayne County northeast of Fountain City, angles to the southwest and leaves the county near Abington. This area known as the Gore because of its triangular shape, opened approximately one-third (1/3) of the county for settlement after it was surveyed. This came at the time when Revolutionary War veterans were desperately looking for land and the Quakers were leaving their land in Virginia and the Carolinas because of their opposition to slavery.

Indian resistance continued and after another defeat at the hands of General William Henry Harrison in 1809, they were forced to sign another treaty known as the "Twelve Mile Purchase". This line parallels the Greenville Line, twelve (12) miles to the west. It passes through the west edge of Cambridge City. This opened most of the balance of Wayne County and helped bring about the War of 1812. Fear of marauding Indians resisting the loss of their hunting ground forced settlers to build blockhouses for protection. The map shows the approximate location of about twenty (20), mostly in the Twelve-Mile Purchase Zone. By 1823, Wayne County was so thickly settled it was the most populous county in Indiana. The land was all claimed usually in quarter section plots (160 acre) or smaller because of the vast labor to clear it. At least twenty (20) villages had been established and a few had already disappeared.

The 1874 map shows much of the history of the settlement of Wayne County. Fifteen (15) townships had been established, each with at least one village. Thirty-seven (37) gristmills (all but two were water powered) were scattered at convenient distances, to grind the corn and wheat which provided the pioneers with their main food. Forty-seven (47) saw mills, even more widely scattered, were built to saw building lumber from the logs. Twenty (20) of these were steam mills, which, of course, burned scraps and sawdust from their own cutting. More new mills were required because it was easier to haul a sack of grain to the mill than a log.

There were eighty-nine (89) churches, over half rural, which helped the pioneer families meet the rigors of pioneer life. There were sixty-two (62) cemeteries nearly all of which still exist. Nearly every rural church had one, as did each village, besides several family burial plots.

TRANSPORTATION

ROADS

Roads were vital to the developing communities. Private investors formed turnpike companies, and they built roads joining the villages and leading to Centerville, the county seat, and Richmond, the largest commercial center. In 1850 these companies were combined into the Wayne County Turnpike Company. Their office is still standing on the east side of Chester Boulevard opposite Waterfall Road. They operated twenty-two (22) turnpikes, including the National Road and the map shows forty-six (46) tollgates located at strategic places to collect fees for the use of the roads. In the early 1890's, the townships purchased these roads from the turnpike company. In addition, the townships maintained the lesser roads that usually followed section lines. The townships in Wayne County were fortunate because stream-washed gravel, in unlimited

amounts, was available in each one. It was the custom for farmers to pay their taxes by hauling gravel for these roads each year after the harvest time. Sometimes twenty (20) to fifty (50) wagons would be working in one township. The wagons held a square yard of gravel. A wagon would be positioned on the road and one sideboard lifted. The bottoms, were made of timbers about four and one-half inches wide and one by one these would be tipped, dumping the gravel under the wagon on the road where desired. Freezing and thawing in winter and blowing dust in summer made gravel hauling an endless job. However, the countless yards of gravel dumped on the Wayne County roadbeds through the years provided a good base for black topping, which came later.

After World War 1, the state took over the maintenance of the main roads and the counties assumed the burden of the remainder.

CANALS

In the early 1840s a canal was constructed along the West Fork of the Whitewater from Brookville through Milton to Cambridge City and then extended to Hagerstown. Constant washouts from heavy rains and the steep gradient made the cost of maintenance prohibitive and it had to be abandoned before 1850. While it operated, it was a great benefit to the areas it served and provided the cheapest and swiftest transportation to the Cincinnati market. Its early success tempted Richmond speculators to attempt an East Fork branch from Brookville to Richmond. Forty-five thousand dollars (\$45,000) was raised and construction begun at three points. The side ditch along the west side of the old Liberty Pike between Backmeyer and Beelor Hills still shows evidence of this effort. The terminal was to be where the Starr Piano Plant was later built.

RAILROADS

The railroad boom hit Wayne County in the early 1850s and, of course, hastened the demise of the canals. These were built in short segments by local investors and later joined to form the rail networks. The first to be completed was the Indiana Central from Richmond to Indianapolis. Other lines were from Richmond to Laton, Ohio, which joined another to Cincinnati and another line went east to Dayton. Still another went to New Castle and soon other segments were added which led to Chicago. In the western part of the county a company bought the towpath of the Whitewater Canal and built a rail line, which extended from Hagerstown to Cincinnati. By the time the atlas was published a line was built from Richmond to Fort Wayne which later became the G.R. & I. The map also shows a proposed line through Cambridge City to the northeast, which was never built. Still another uncompleted line was planned from Richmond to the southwest. A cut made for it is still visible east of Salisbury Road about 1/4 mile south of Route 40. Like the roads, the railroads drew on the gravel resources of Wayne County. Lake Wehi, until recently our largest body of water, was the result of gravel taken for the Indiana Central and later main line of the Pennsylvania. The deep trench north of Northwest L and west of Northwest 5th in Richmond furnished gravel for the G.R. & I.

INTERURBAN

This form of transportation should be mentioned although it did not appear until 1890. Individual cars were driven by electricity. The Terre Haute, Indianapolis and Eastern built a line along the north side of the National Road through Richmond to Dayton. In the villages the tracks were in the center of the National Road and in Richmond they used the streetcar tracks originally laid for cars pulled by mules or horses. A spur line was built from Cambridge City through Milton to Connersville. Interurban lines radiated out of Indianapolis to almost any point in the state. Wherever they went the villages served were the first to have electricity.

INDUSTRY

Almost every village had a blacksmith shop, pottery, tan yard and harness or saddle shop, saw mill, slaughterhouse where pork was usually packed for market and the usual mercantile

stores. The atlas shows seven (7) brick yards, five (5) tile plants, two (2) lime kilns, three (3) limestone quarries, five (5) woolen mills, two (2) paper mills, one (1) sorghum mill and one (1) knife factory. Agricultural implements were manufactured in Milton, Dublin and Richmond. The power for these enterprises was either from waterwheels, horses on treadmills or steam. Steam plants depended on wood at least until railroads made coal available. All of these enterprises served the basic needs of a developing territory.

HISTORIC SITES

This map repeats the sites already listed in the National Registry and the Indiana Survey and attempts to indicate a few of the significant buildings that remain. There are only three (3) mills still standing. The Cox Mill in Middleboro has been converted to a private residence. The Moffit Mill located at 1136 North 12th Street in Richmond is the warehouse for the Ace Automotive Supply Company. Part of a sawmill on Hiser Road still stands but is in ruins. A Tollhouse for the Richmond-Williamsburg Turnpike still stands where Northwest 5th crosses the pike in Richmond. Another stands at the corner of the Pennville and Pottershop Roads. The abutments for the National Road Bridge are still visible just below the Main Street Bridge in Richmond. The part of the Swayne Robinson Plant facing National Road was built in 1842 and should be preserved if at all possible.

The two Historic Districts in Richmond and the one in Centerville are a step toward preserving some of the significant historic buildings. Other districts are possible in East Germantown, Cambridge City and Dublin. Registration of individual buildings requires someone to take the time to go through some red tape and, of course, the consent of owners.

Our heritage is too rich to have all evidences wiped out by highways, parking lots and modern architecture.

Prepared by Robert N. Huff, 1976
Updated by Ed Pollock, 2001

XI. FLOOD HAZARD ANALYSIS OF WAYNE COUNTY

The Wayne County Soil & Water Conservation District, the Wayne County Department of Planning, and the Richmond Department of City Planning requested in 1972 that this study be made. The Department of Natural Resources, State of Indiana, established previously for the study to be carried out with assistance of the U.S. Department of Agriculture, Soil Conservation Service as authorized under Section 6, PL 83-566, as amended.

The purpose of the Flood Hazard Study is to define areas subject to flooding so that adequate measures may be established to limit land use and future development in flood-prone areas, thereby reducing flood damages. Areas subject to inundation by a 100-year frequency flood were identified for all stream studies. Flood limits for the 50-year frequency flood and Standard Project Flood are identified and shown in the reports.

The nine studies have been completed in order to accomplish the following objectives:

1. Identify flood hazard areas for planning and zoning purposes for the orderly control of land use.
2. Preserve adequate flood ways along the streams.
3. Plan flood protection measures and elimination of serious encroachments (building and development) within the 100-year flood-prone areas.
4. Prevent future flood damages through guidance and regulation of the use of lands subject to flooding.
5. Reduce future local, state and federal expenditures for flood fighting, relief and flood protection.

The nine systems and reports include the following streams:

1. Short Creek
2. Lick & Clear Creek
3. West Fork, Nettle and Criety Creek
4. Noland's Fork - Branch of West Fork
5. Greens Fork - Branch of West Fork
6. Martindale Creek - Branch of West Fork
7. West Fork, Middle Fork, East Fork of the Whitewater River
8. Crown Creek - Centerville

Each study provides:

- I. Description of Study area:
 - A. Drainage Area
 - B. Channel Gradient of Floodway Velocities

- II. Flood History
- III. Flood Potential - Present Condition
- IV. Flood Plain Management
 - A. Effective Flood Plain Management State of Indiana
 - B. View of Regulatory Flood Plan
- V. Appendix A - Index Map
- VI. Appendix B - Flood Hazard Area Photo Maps
- VII. Appendix C - Flood Profiles
- VIII. Appendix D - Selected Cross Sections
- IX. Appendix E - Flood Frequency - Elevation - Discharge Data
- X. Appendix F - Investigations, Analysis and Technical Data
- XI. Appendix G - Glossary
- XII. Appendix H - Bibliography

This Flood Hazard Analysis Data and Information is available at Wayne County Plan Department, Richmond City Plan Department, other Planning Guide Units of Wayne County, Wayne County Soil and Water Conservation District and Soil Conservation Service Office.

XII. NARRATIVE - 50 FOOT TOPOGRAPHIC CONTOUR LINES

This map shows, by use of contour lines, the topography, or shape of the land surface, of Wayne County. The contour lines were taken from appropriate U.S. Geological Survey topographic maps (see list below) and were replotted onto a Wayne County base map. This map provides a means for visualizing the overall form of the landscape and it allows close estimation of the elevation of any location in the county. It also makes possible determination of such things as relief (difference in elevation between high and low points) and angle and uniformity of slope. An understanding of contour lines is necessary in order to use the map most effectively.

A contour line is simply an imaginary line that connects all points on the earth's surface having a particular elevation above sea level. A contour or topographic map is a map that shows contour lines. For example, all points exactly 1,000 feet above sea level would form (and lie on) the 1,000 foot contour line. One way to visualize the nature of this contour line is to imagine that sea level rises by 1,000 feet, thereby covering parts of Wayne County. The resulting shoreline would occupy the position of the 1,000 foot contour line; the area on one side of it, below 1,000 feet, would be submerged while the area on the other side, above 1,000 feet, would be dry land. If this imaginary sea rises another 20 feet, the new shoreline would be along the 1,020 contour line of the map. If it rose another 20 feet, it would be along the 1,040 foot contour line. This vertical distance, or difference in elevation between adjacent contour lines, 20 feet in this example, is called the contour interval. On the Wayne County map the interval is 50 feet. The elevation of each contour line is indicated by the small number along the line.

The surface elevation of any location in Wayne County can be determined by its relationship to contour lines. A point that is directly on a contour line obviously has the same elevation as that line. A point that is between two contour lines has an elevation that must be between those of the two adjacent lines. This elevation can be estimated by noting how close the point is to each line. Thus, a point midway between the 1,000 and the 1,050 foot contour lines would be about 1,025 feet above sea level; a point two-thirds of the way from the 1,000 foot contour line toward the 1,050 foot contour line would have an elevation of about 1,035 feet.

Any contour line, if it is followed far enough, will always curve around to connect with the other end of the same line thereby enclosing space within the line. The area inside a closed contour line is higher than the line and that outside the line is lower, thus the summit of a hill is inside the highest (and smallest) of a group of more-or-less concentric lines. Some lines must be traced for great distances to "close". For instance, the 5 foot contour line along the California coast must be followed all the way around the North American continent, but others "close" within small areas, such as the 1,100 foot line in section 24, one mile east of Hagerstown. Most of the contour lines on the Wayne County map do not "close" within the map area.

Contour maps are used to show the shape, height, and steepness of the hills, valleys and slopes of an area. Where contour lines are closest together, the slopes are steepest and where far apart, the land is more nearly flat. A perfectly flat area would show no contour lines at all. Where contour lines are equally spaced, slopes are uniform and vice versa. Slope angles, or gradients, can be determined by noting, by use of contour lines, how much vertical change in elevation occurs in a measured horizontal (map) distance. For example, Potter Shop Road west from Abington rises 200 feet, from 850 feet to 1,050 feet in elevation in a horizontal (map) distance of about 7,000 feet. This rise averages a little less than 3 feet vertically in each 100 feet horizontally, or the grade is slightly less than 3 percent. Direction of stream flow can be determined quickly by noting in which way the stream crosses lower elevation contours; that is, which is the downhill direction. Stream gradient can be calculated in the same way as slope or road gradients

This map shows that the overall topographic "grain" of most of Wayne County consists of northeast-southwest trending stream valleys separated by flat, higher divides. Valley bottoms are narrowest and valley walls steepest in the southeast part of the county. Local relief (vertical distance between high and low points) is less than 150 feet in most areas, with the greatest relief in the southeast part of the county. The total relief in Wayne County is about 400 feet.

For some purposes, a contour interval of 50 feet may be too large. For those needing more detailed information, topographic quadrangle maps with a contour interval of 10 feet are available from the U.S. Geological Survey. Parts, or all, of the following 16 quadrangles are included in Wayne County: Modoc, Carlos, Lynn, Spartanburg, Hagerstown, Greens Fork, Fountain City, Whitewater, Cambridge City, Jacksonburg, Richmond, New Paris, Connersville, Brownsville, Liberty and Fairhaven.

XIII. NARRATIVE - GENERAL SOIL MAP

The general soil map shows broad areas that have a distinctive pattern of soils, relief and drainage. Each map unit on the general soil map is a unique cultural landscape. Typically, a map unit consists of one or more major soils and some minor soils. It is named for the major soils. The soils making up one unit can occur in other units but in a different pattern.

The general soil map can be used to compare the potential or suitability of large areas for general kinds of land use. Because of its small scale, the map is not suitable for planning the management of a farm or field or for selecting a site for a road or building or other structure. The soils in any one map unit differ from place to place in slope, drainage and other characteristics that affect management. The general soil map has value in planning the general outline of urban expansion, although it cannot be used to select sites for specific buildings or structures.

The soils of Wayne County were first mapped in 1925. The soil names used on pages 11 and 12 are based on the 1925 survey. A modern soil survey was completed in 1981. Due to changes in concepts of soil series and in the adoption of the soil classification system, the names and boundaries of the two surveys may not match. On the basis of the recent mapping, the following general soil associations are recognized in Wayne County.

1. STONELICK

This map unit occupies about 1% of the county, of which about 88% is Stonelick and 12% minor soils. It consists of deep, nearly level, well drained soils formed in alluvium. These soils occupy the floodplains of stream and are lower in elevation than the adjacent river terraces.

The minor soils within the unit are Sloan and Shoals.

These soils are well suited to cultivated crops, pasture and woodland with flooding being the major management concern. Due to flooding, building site development on these soils is unsuited.

2. ELDEAN - OCKLEY

This map unit occupies about 20% of the county, of which about 35% is Eldean, 25% is Ockley and 40% are minor soils. It consists of deep, nearly level to strongly sloping, well drained and very poorly drained soils formed in outwash. These soils occupy terraces, which are higher than adjacent flood plains and lower than the adjacent uplands, along the major drainage ways that dissect the county.

The well drained Eldean soils underlain with sand and gravel at a depth of 20-40 inches are located on broad level and sloping terraces while the well drained Ockley soils are located on broad terraces and are underlain with sand and gravel at depths of greater than 40 inches.

The minor soils within the unit are Genesee, Stonelick, Shoals, Sleeth, Westland, Mahalaville and Rodman.

These soils are suited to cultivated crops, pasture and woodland with erosion and drought being the major management concerns. These soils are also suited to building site development but have major concerns of poor filtering and low strength.

3. XENIA - RUSSELL - MIAMI

This map unit occupies about 3% of the county, of which about 29% is Xenia, 23% is Russell, 14% is Miami and 34% are minor soils. It consists of deep, gently sloping to strongly sloping well drained and moderately well drained soils formed in loess and glacial till.

The moderately well drained Xenia soils are located on the broad loess covered ridge tops while the well drained Russell soils occur on the side slopes and narrow ridge tops along drainage ways. The well drained Miami soils occur also on the side slopes.

The minor soils within the unit are Stonelick, Shoals, Treaty, Fincastle and Hennepin.

These soils are suited to cultivated crops. Pasture and woodland with erosion being the major management concern. These soils are also suited to building site development but have major concerns of low strength, frost action, permeability and wetness.

4. MIAMI - CROSBY - STRAWN

This map unit occupies about 46% of the county, of which about 40% is Miami, 22% is Crosby, 21% is Strawn and 17% are minor soils. It consists of deep, nearly level to steep, well drained and somewhat poorly drained soils formed in glacial till. These soils occupy ridge tops and side slopes along drainage ways on uplands with the somewhat poorly drained soils on the ridge top and the well drained soils on the side slope.

The well drained Miami soils are located on higher positions of the uplands or on side slopes along drainage ways. The somewhat poorly drained Crosby soils are located on the nearly level ridge tops and the well drained Hiser soils occur on the severely eroded side slopes along drainage ways.

The minor soils within the unit are Treaty, Celina, Genesee, Stonelick and Shoals.

These soils are suited to cultivated crops, pasture and woodland with erosion and wetness being the major management concerns. Building site development on these soils is limited due to slope, wetness and permeability.

5. LOSANTVILLE - CROSBY

This map unit occupies about 5% of the county, of which about 71% is Losantville, 19% is Crosby and 10% are minor soils. It consists of deep, nearly level to strongly sloping well drained and somewhat poorly drained soils formed in glacial till. These soils occupy broad ridge tops along drainage ways on uplands.

The well drained Lewisburg soils are located on the side slopes adjacent to drainage ways while the somewhat poorly drained Crosby soils occur on the higher irregular shaped flats and low knolls in the landscape.

The minor soils within the unit are Eldean, Genesee and Treaty.

These soils are suited to cultivated crops, pasture and woodland with erosion and wetness being major management concerns. Building site development on these soils is limited due to wetness, slope and permeability.

6. TREATY - RAGSDALE - FINCASTLE

This map unit occupies about 2% of the county, of which about 19% is Treaty, 21% is Ragsdale, 14% is Fincastle and 46% are minor soils. It consists of deep, nearly level, poorly drained and somewhat poorly drained soils formed in loess and glacial till. These soils occupy island-like areas surrounded by depressions and swales on loess covered upland.

The very poorly drained Treaty and Ragsdale soils are located in the swales and depressions while the somewhat poorly drained Fincastle soils are on island like slight rises in the landscape.

The minor soils within the unit are Miami, Russell, Xenia, Reesville and Halpaaquepts.

These soils are suited to cultivated crops, pasture and woodland with wetness being the major management concern. Building site development on these soils is limited due to wetness, slope and permeability.

7. CROSBY - TREATY

This map unit occupies about 10% of the county, of which about 60% is Crosby, 20% is Treaty and 20% are minor soils. It consists of deep, nearly level, somewhat poorly drained and very poorly drained soils formed in glacial till. These soils occupy island-like areas surrounded by depressions and swales on uplands.

The somewhat poorly drained Crosby soils are located on the higher, island-like low knolls while the very poorly drained treaty soils occur in depressions and swales.

The minor soils within the unit are Hiser, Miami, Celina, Genesee and Shoals.

These soils are suited to cultivated crops, pasture and woodland with wetness being the major management concern. Building site development is limited due to wetness, ponding and permeability.

8. CROSBY - LOSANTVILLE - TREATY

This map unit occupies about 8% of the county, of which about 42% is Crosby, 35% is Losantville, 15% Treaty and 8% are minor soils. It consists of deep, nearly level to moderately sloping, well drained, somewhat poorly drained and very poorly drained soils formed in glacial till and loess. These soils occupy the side slopes, small flats, drainage ways and depressions on rolling uplands.

The somewhat poorly drained Crosby soils are located on the irregular shaped flats and low knolls in the landscape while the well-drained Losantville soils occur on the side slopes adjacent to drainage ways and the very poorly drained Treaty soils occur in depressions and narrow shallow drainage ways.

The minor soils within the unit are Eldean, Genesee and Celina.

These soils are suited to cultivated crops, pasture and woodland with erosion, wetness and large stones being the major management concerns. Building site development is limited due to wetness, slope, permeability and ponding.

9. MIAMI - WYNN - EDEN

This map unit occupies about 5% of the county, of which about 23% is Miami, 16% is Wynn, 13% is Eden and 48% are minor soils. It consists of deep and moderately deep, gently sloping to very steep, well-drained soils formed in glacial till. These soils occupy narrow ridges and steep side slopes adjacent to drainage ways and uplands.

The well-drained Miami soils are located on slightly higher elevations in the landscape, with more than 60 inches of soil over bedrock. The well drained Wynn soils occur on less sloping areas above the Eden soils of the bedrock-controlled topography with a depth to bedrock of 20 to 40 inches. The well-drained Eden soils occur on the steep side slopes of drainage ways with bedrock at depths of 20 to 40 inches.

The minor soils of the map unit are Treaty, Millsdale, Crosby, Randolph, Hiser, Rodman, Hennepin, Eldean, Ockley, Stonelick and Shoals.

The gently sloping and moderately sloping soils are suited to cultivated crops with erosion being the main management concern while the more sloping soils are poorly suited for cultivated crops but are well suited to pasture and woodland. Building site development is limited due to slopes, depth to bedrock and permeability.

LAND CAPABILITY CLASSIFICATIONS

In addition to general soils associations, land is also classified according to its capability for growing farm crops, grass, trees or wildlife habitat. The land use classification assigns the Class I designation to soils that are ideally suited for crop production and have no limitations which must be corrected before use. Higher class numbers are assigned to soils that have limitations that increase hazards and costs of crop production.

The 252,135 acres of land in Wayne County fall into the following capability classes.

I	16,450 acres	V	100 acres
II	166,925 acres	VI	9,905 acres
III	21,095 acres	VII	5,320 acres
IV	32,340 acres	VIII	0 acres

A description of the eight land capability classifications follows:

Class I

Class I is very good, productive land that can be safely cultivated with ordinary farming methods. It is nearly level, deep, well or moderately well drained, easily worked and suitable for intensive cultivation. Soils in Class I have little or no hazard of erosion or flooding during the cropping season and have no other permanent limitation. They will grow all crops suited to the climate.

Class II

Class II is good land but has some limitations that make it a little more difficult to manage than Class I land. Soils in this class require careful soil management to prevent deterioration when cultivated. Class II soil may be limited by the effects of gentle slopes, moderate susceptibility to erosion or effects of past erosion, shallow soil depth, and or wetness correctable by drainage.

Class III

Class III land is moderately good for cultivation. It can be farmed regularly, but its limitations are greater than for Class II land and, therefore, must be farmed more carefully. Soils in this class may be affected by moderate slopes, highly susceptible to erosion or severely affected by past erosion, very wet or other limitation affecting the depth of rooting zone for crops.

Class IV

Soils in Class IV have very severe limitations that restrict their use for cultivated crops and require very careful management. The use of Class IV land for cultivated crops is limited by the effects of one or more of these permanent features: (1) strong slope, (2) susceptibility to erosion, (3) severe past erosion, (4) very shallow soils with limited root zone, (5) low moisture-holding capacity, and (6) excess wetness with a continuing hazard of waterlogging even after drainage.

Class V

Soils in Class V have little or no erosion hazard but have other natural features that make them unsuited for cultivation. They are nearly level, but some are wet, cut up by braided stream channels, frequently overflowed, stony or have some combination of these limitations that prevent normal tillage of cultivated crops. These soils are more suitable for pastures.

Class VI

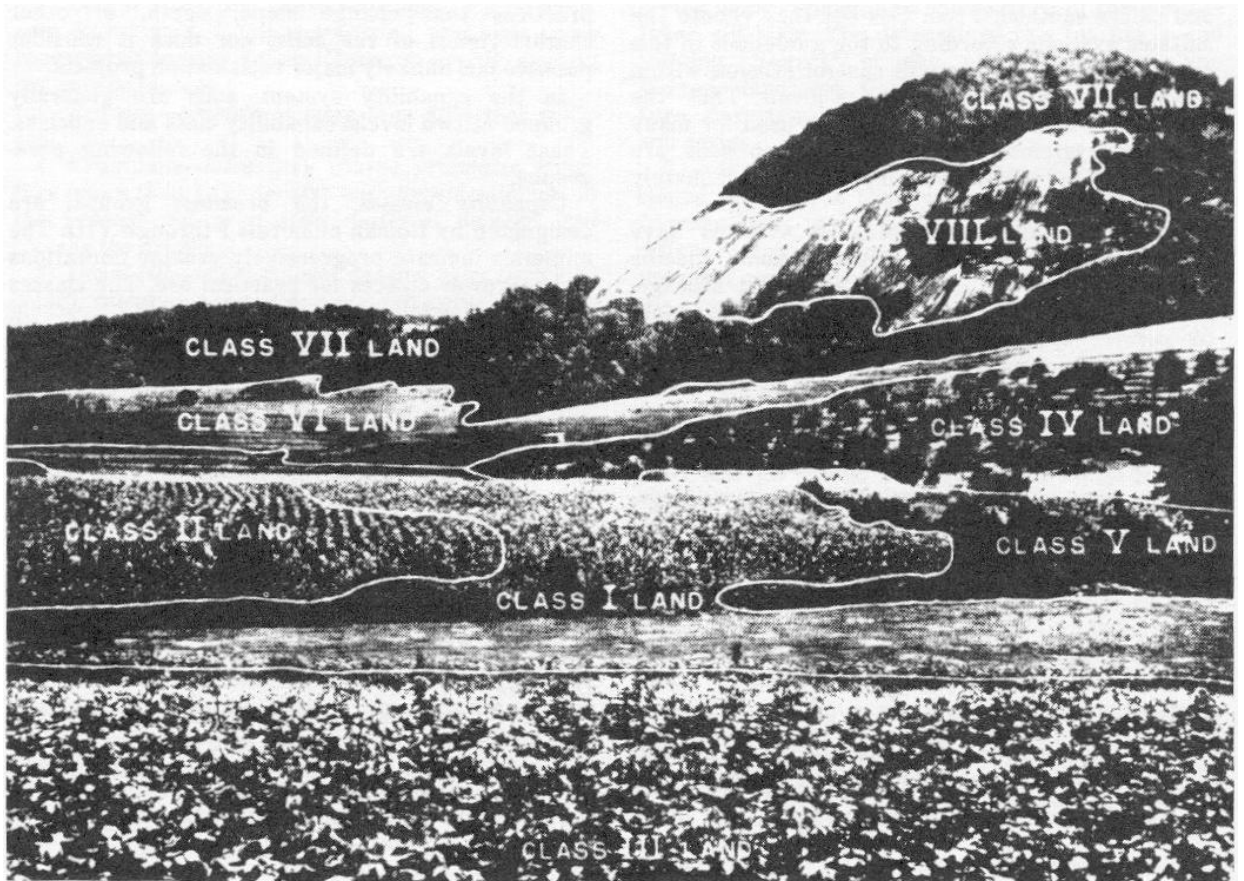
Soils in Class VI have severe limitations that make them generally unsuited for cultivation and limit their use largely to pasture, woodland or to wildlife food production or cover. These soils have one or more of these natural features which cannot be corrected: (1) steep slopes, (2) severe erosion hazard, (3) very thin or no surface soil because of severe past erosion, (4) very shallow rooting zone, (5) stoniness, and (6) low moisture-holding capacity. These may occur singly or in combination. Most soils in Class VI are on steep rolling areas or along drainage ways and are in pasture or reseeded back to trees.

Class VII

Soils in Class VII have very severe limitations that make them unsuited for cultivation and that restrict their use to woodland, wildlife food production or cover, or permanent pasture. These soils have natural features similar to those in Class VI, but the restrictions are more severe. Soils in Class VII may be very steep, steep and gullied, stony, and steep with severe erosion.

Class VIII

Soils and landforms in Class VIII have natural features that limit their use to recreation, wildlife or aesthetic purposes. These soils and landforms cannot be expected to return significant benefits from management for crops, grasses or trees. Class VIII includes outcrops, riverwash, shaft mine and some strip mine dumps, shallow lakes, sand beaches and other nearly barren lands.



Examples of the eight land capability classes are shown above.

More detailed descriptions and information on soils in Wayne County may be obtained from the Natural Resources Conservation Service Office in the County Administration Building, Richmond, Indiana, 966-8219.

XIV. NARRATIVE - POTENTIALLY SUITABLE LANDFILL SITES MAP

The Potentially Suitable Landfill Sites map shows, by cross-hatching, those parts of Wayne County which existing geological and soils data indicate to be potentially suitable for an environmentally acceptable landfill. Areas not cross-hatched are unsuitable for a landfill because of one or more geological or soil limitation. Suitability as shown on this map, is based only on the physical properties of the surface and subsurface earth material as shown on geological and soils maps of Wayne County. Other constraints such as present land use, and legal, political or social concerns were not considered.

Geological constraints which eliminated some areas are the presence of aquifers (water-bearing material), sand or gravel at or near the surface and the existence of bedrock at shallow depths. Soils maps were used to eliminate flood prone areas and areas where soils are too steep, dominantly wet or poorly drained or contain numerous boulders. Remaining areas are identified as potentially suitable.

This map is intended for general planning only. When specific landfill sites are identified, detailed soil and subsurface geological investigations will be needed to verify that no undesirable material or condition exists, either on or below the surface, that could result in landfill leachates being transmitted to wells, aquifers, water courses or bodies or any other water source.

XV. NARRATIVE - REFUSE DISPOSAL SITES MAP

The Refuse Disposal Sites map shows approximate locations of former city and town open dumpsites, industrial dump sites and city managed landfills.

Prior to the adoption of legislation to control the disposal of refuse, it was the policy of towns and communities to use open dumpsites.

These sites were often in low lying areas, abandoned gravel pits, on eroded river banks, or on areas made available by individuals who wished to have a low spot filled. After many of these areas were filled, they were developed for residential or commercial use.

The areas shown on the "Refuse Disposal Sites Map" indicate the approximate locations of major dumpsites used prior to present regulations. Records do not show any legal description of the properties used.

The Indiana Legislature passed laws in 1965 and 1969 that required counties, cities and towns to operate and maintain facilities for the collection and disposal of refuse and declared open dumps to be unfavorable to human health.

Both Wayne County and the City of Richmond passed garbage and trash control ordinances in 1969. A Wayne County Health Department regulation issued in 1970 prohibited open dumps after January 1, 1971. Since that time Wayne County solid waste has been disposed of at New Paris Pike landfill owned and operated by Richmond Sanitary District or by transport to an out-of-county landfill. Certain industries dispose of their industrial wastes at sites on their own properties.

Prepared by Mal Price and Shirley Rodgers
April 1986

XVI. NARRATIVE - PRESERVING OUR HERITAGE WAYNE COUNTY

How the GB-3 Restricted District Zoning Classification
Helps Protect and Preserve Our Natural Resources

PRESERVING OUR HERITAGE

WHAT IS GB - 3 RESTRICTED DISTRICT?

The Wayne County Indiana Zoning Ordinance that was adopted on March 10, 1993 included a zoning district to protect and preserve the natural resources of Wayne County. This section is Wayne County Zoning Ordinance 54.72-73.

"It is the purpose of this district to preserve areas of any size in the county having special resources of a nature that are environmentally sensitive, unique, aesthetic, significantly rare, or of an endangered biological productivity." (Wayne County Zoning Ordinance 54.72: Purpose)

HOW DOES THIS SECTION OF THE ZONING ORDINANCE AFFECT ME?

You have the ability to help preserve the natural resources of Wayne County by encouraging the use of this Zoning Ordinance. If you own land that has special resources of a nature that are environmentally sensitive, unique, aesthetic, significantly rare, or of an endangered biological productivity, you can petition to change the current classification of that part of your land to GB-3.

If you do not own such land, you can encourage others to preserve their land in a way that insures that future generations of Wayne County citizens will have a heritage of natural resources.

HOW WOULD HAVING LAND CLASSIFIED AS GB - 3 PROTECT THE NATURAL RESOURCES OF WAYNE COUNTY?

Land that has been classified as GB-3 will be restricted in use and development.

"A. Use Restrictions. Except in extraordinary cases of overriding public need or interest, uses shall only be permitted that are consistent with intent to protect conservation districts from any use that is inconsistent with protecting the character of the environmentally sensitive, significantly rare, or endangered biological productivity or character, or of other unique qualities.

B. Development Restricted. There may be no activity, construction, or development, or use of the land in this zone that will endanger, destroy or modify the current environmentally sensitive uses, or which would significantly alter the ecological integrity, balance, character, except in the case of overriding public need or interest. These areas might include marshes, bogs, woodlands, wetlands, waterways and other areas of significant biological productivity or uniqueness." (Wayne County Zoning Ordinance 54.73 RESTRICTIONS, Sections A and B)

This section of the Zoning Ordinance also includes a section on easements.

"C. Conservation Easement. This zone may at the time of rezoning, include an easement granting a right or interest in real property that is appropriate to retaining land or water areas predominantly in their natural, scenic, open or wooded condition; retaining such areas as suitable habitat for fish, plants or wildlife; or maintaining existing land uses." (Wayne County Zoning Ordinance 54.73 RESTRICTIONS. Section C)

Through this section, the interest in preserving the condition of the land, a conservation easement, could be transferred to a land trust for preservation.

HOW DO I PETITION FOR A CHANGE OF CLASSIFICATION OF PROPERTY?

The procedure is not difficult. First determine if your land qualifies for classification as a GB-3. The Wayne County Resource Inventory Council, whose address and phone number appear below, can assist you in determining if your land or any part of it qualifies for classification as a GB-3.

If your land is environmentally sensitive, unique, aesthetic, significantly rare, or of an endangered biological productivity, then you will follow the procedure for changing the classification of your land as it is outlined in the Wayne County Indiana Zoning Ordinance ARTICLE XIX DISTRICT CHANGES AND REGULATION AMENDMENTS. A copy of this section can be obtained from the Wayne County Resource Inventory Council.

The basic procedure is:

1. Petition for a change of classification of property by submitting to the clerk of the County Commissioners the forms and information necessary.
2. There will be a public hearing within 60 days before the Plan Commission.
3. The Plan Commission determines its recommendation of favorable recommendation, an unfavorable recommendation, or no recommendation.
4. The County Commissioners will make their determination within the next ninety (90) days.

There are variations of timing and procedure, but this is the procedure that you can usually expect to be followed if you request to zone your land or part of your land GB-3.

WILL I NEED AN ATTORNEY TO ASSIST ME?

Most likely you will not need an attorney to assist you in having the classification of your land changed to GB-3. The Wayne County Resource Inventory Council is willing and able to assist you in any or all parts of the procedure.

You can contact the Wayne County Resource Inventory Council by writing:

Wayne County Planning Department
Wayne County Administration Building
Richmond, Indiana 47374

Or by phoning: (765) 973-9249

You may also contact: Ed Pollock
Executive Director
Wayne County Resource Inventory Council
Phone: (765) 962-5148

XVII. NARRATIVE - ARCHEOLOGY: UNCOVERING WAYNE COUNTY'S PAST

Most of the prehistoric (that period up to approximately 1650 AD) cultures known to exist in this part of Indiana are represented in Wayne County. These cultures include the Paleo tradition (from glacial retreat up to 8,000 BC), the Archaic (8,000 BC - 1,000 BC), the Woodland period (1,000 BC - 1,000 AD) and the Mississippian (1,000 AD - 1650 AD). While all of these societies can be documented in Indiana, the nature of the Mississippian tradition in Wayne County remains an enigma. More work is needed before any definite statements can be made. The majority of sites documented in Wayne County represent Archaic encampments, but Early and Middle Woodland mounds and earthworks are well documented too. Wayne County has a rather unique Late Woodland tradition that has been represented by a site just south of Earlham and other sites in the upper Whitewater Valley. There are no documented Fort Ancient/Mississippian villages, whether they exist and have not been recorded or the Late Woodland tradition continues late here is not known. Survey work may reveal sites that may answer this question and add light to the odd amalgamation of Fort Ancient influenced Oliver-like assemblages.

Brief descriptions of these cultures are contained in James H. Kellar's An Introduction to the Prehistory of Indiana, (1983). This book is available from the Indiana Historical Society in Indianapolis as well as in the reference section of the Morrison-Reeves Library in Richmond.

Historic artifacts and features in Indiana date back to approximately 1650 AD (the beginning of written records). These refer to peoples of many ethnic and cultural backgrounds. They include Native Americans and many people of Old World cultural backgrounds that settled in and populated this area.

According to the State Archeologist, only about 5% of Wayne County has been surveyed for archeological value including approximately 273 identified sites. The exact nature of these sites is unknown since it is the policy of the State Archeologist to not disclose this information in order to minimize vandalism and/or looting. This means 95% of our county has not been surveyed to register archeological sites so that they can be considered in plans for county development.

These unknown sites, in many cases, may only consist of a scatter of flint chips, fire cracked rocks, and may be completely in the disturbed plow zone of fields. They may have little potential to yield a great deal of information about Wayne County's prehistory. However, there are undoubtedly a number of sites that may lie buried beneath the silts of time, which are still relatively intact. These have the potential to yield features, post holes, hearths, artifacts, and physical remains that can be studied to answer questions about our prehistory. Everyone to better understand and appreciate our heritage can use these answers. Many of these sites are invisible to most of the population and are difficult to see on the surface for the untrained eye. Unfortunately many have been destroyed. They are a fragile and irreplaceable resource.

A standing building such as the Star-Gennett area in the Whitewater Gorge is an example of a historic archeological site. While many of these are still present, much information about them is lost and too frequently they are destroyed with little thought of rehabilitating them and the architectural flavor of the community is lost.

Some common site types include old homesteads and farms with their accompanying outbuildings. However, one should not forget the old roads, trails, parks, canals, dams, quarries, cemeteries, mills, and industrial and business sites.

Archeological sites and historic and prehistoric burial sites are protected by Indiana under the Indiana Historic Preservation Act (Amended by P.L. 175 in 1989). These sites are protected regardless of location on state or private lands. All human burial sites are protected under the Indiana General Cemetery Act.

Any discovery of human remains or disturbance of a human burial site should be reported to the Indiana Department of Natural Resources, Division of Law Enforcement or the Indiana Department of Natural Resources Division of Historic Preservation. In the event a human burial or archeological site is accidentally discovered by construction or earth moving activity, all excavation must stop. The discovery must be reported to the I.D.N.R. within two working days. This is required by Indiana law. This same law also requires notification of the Indiana Department of Natural Resources to report any looting of archeological sites.

Any questions regarding archeology in Wayne County, Indiana should be directed to Dr. Rick Jones, Division of Historic Preservation and Archeology, 402 West Washington Street, Room W274, Indianapolis, Indiana, 46204, phone (317) 232-1646.

Bibliography

Heilman, James M. (1976) The Prehistory of Wayne County, Indiana, Master's Thesis, Kent State University, Kent, Ohio

Kellar, James H. (1983) An Introduction to the Prehistory of Indiana.

McCullough, Robert G. (1991) A Reanalysis of Ceramics From the Bowen Site: Implications for Defining the Oliver Phase of Central Indiana, Master's Thesis, Ball State University, Muncie, Indiana.

Setzler, Frank M. (1930) The Archeology of the Whitewater Valley, Indiana History Bulletin, Vol. VII, No. 12, Indianapolis, Indiana.

Edited by James M. Heilman, Archeologist, Dayton Museum of Natural History