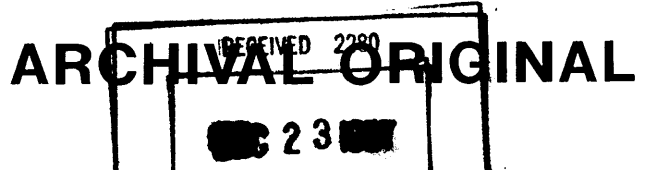


97-1676

United States Department of the Interior
National Park Service



National Register of Historic Places
Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in *How to Complete the National Register of Historic Places Registration Form* (National Register Bulletin 16A). Complete each item by marking "X" in the appropriate box or by entering the information requested. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name Old State Quarry

other names/site number North Bend Quarries; Capitol Quarry; Old Capitol Quarry; State Quarry

2. Location

street & number 0.1 mi S of S end of Rice Ridge Lane NE, Coralville Lake [N/A] not for publication

city or town North Liberty [X] vicinity

state Iowa code IA county Johnson code 103 zip code 52317

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this nomination request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property meets does not meet the National Register criteria. I recommend that this property be considered significant nationally statewide locally. ([] see continuation sheet for additional comments).

Paul D. R. DSR
Signature of certifying official/Title Date 31 July 1997

Federal Preservation Officer, U.S. Army Corps of Engineers
State or Federal agency and bureau

In my opinion, the property meets does not meet the National Register criteria. ([] See continuation sheet for additional comments.)

Patricia Omerini, DSHPO
Signature of certifying official/Title Date 2-3-97

State Historical Society of Iowa
State or Federal agency and bureau

4. National Park Service Certification

- I hereby certify that the property is:
- entered in the National Register. See continuation sheet.
- determined eligible for the National Register. See continuation sheet.
- determined not eligible for the National Register.
- removed from the National Register.
- other, (explain:)

Signature of the Keeper *Jonda McCullard* Date of Action *2/23/98*

Old State Quarry
Name of Property

Johnson County, Iowa
County and State

5. Classification

Ownership of Property
(Check as many boxes as apply)

Category of Property
(Check only one box)

Number of Resources within Property
(Do not include previously listed resources in the count.)

- private
- public-local
- public-State
- public-Federal
- building(s)
- district
- site
- structure
- object

Contributing	Noncontributing	
_____	_____	buildings
1	_____	sites
_____	_____	structures
_____	_____	objects
1	_____	Total

Name of related multiple property listing
(Enter "N/A" if property is not part of a multiple property listing.)

Number of contributing resources previously listed in the National Register

N/A

0

6. Function or Use

Historic Functions

(Enter categories from instructions)

EDUCATION/research facility

INDUSTRY/extractive facility

Current Functions

(Enter categories from instructions)

LANDSCAPE/natural feature

7. Description

Architectural Classification

(Enter categories from instructions)

N/A

Materials

(Enter categories from instructions)

foundation N/A

walls N/A

roof N/A

other N/A

Narrative Description

(Describe the historic and current condition of the property on one or more continuation sheets.)

Old State Quarry
Name of Property

Johnson County, Iowa
County and State

8. Statement of Significance

Applicable National Register Criteria

(Mark "X" in one or more boxes for the criteria qualifying the property for National Register listing.)

- A** Property is associated with events that have made a significant contribution to the broad patterns of our history.
- B** Property is associated with the lives of persons significant in our past.
- C** Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- D** Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations

(Mark "X" in all the boxes that apply.)

Property is:

- A** owned by a religious institution or used for religious purposes.
- B** removed from its original location.
- C** a birthplace or grave.
- D** a cemetery.
- E** a reconstructed building, object, or structure.
- F** a commemorative property.
- G** less than 50 years of age or achieved significance within the past 50 years.

Narrative Statement of Significance

(Explain the significance of the property on one or more continuation sheets.)

9. Major Bibliographical References

Bibliography

(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

Previous documentation on file (NPS):

- preliminary determination of individual listing (36 CFR 67) has been requested
- previously listed in the National Register
- previously determined eligible by the National Register
- designated a National Historic Landmark
- recorded by Historic American Buildings Survey # _____
- recorded by Historic American Engineering Record # _____

Areas of Significance

(Enter categories from instructions)

Architecture

Industry

Science

Period of Significance

1842-1911

Significant Dates

1842

1874

1897

Significant Person

(Complete if Criterion B is marked above)

Calvin, Samuel

Cultural Affiliation

N/A

Architect/Builder

N/A

Primary location of additional data:

- State Historic Preservation Office
- Other State agency
- Federal agency
- Local government
- University
- Other

Name of repository:

Iowa Geological Survey, University of Iowa

Old State Quarry
Name of Property

Johnson County, Iowa
County and State

10. Geographical Data

Acreage of Property 1.7 acres

UTM References

(Place additional UTM references on a continuation sheet.)

1	[1][5]	[6][1][8][8][6][0]	[4][6][2][4][2][6][0]	2	[][]	[][][][]	[][][][][]
	Zone	Easting	Northing		Zone	Easting	Northing
3	[][]	[][][][][]	[][][][][][]	4	[][]	[][][][][]	[][][][][][]
					[] See continuation sheet		

Verbal Boundary Description

(Describe the boundaries of the property on a continuation sheet.)

Boundary Justification

(Explain why the boundaries were selected on a continuation sheet.)

11. Form Prepared By

name/title E. Arthur Bettis III, Jean C. Prior, and Brian J. Witzke/Research Geologists and Leah D. Rogers/Historian

organization Iowa Department of Natural Resources - Geological Survey Bureau date September 5, 1996

street & number 109 Trowbridge Hall telephone 319-335-1575

city or town Iowa City state IA zip code 52242-1319

Additional Documentation

Submit the following items with the complete form:

Continuation Sheets

Maps

- A **USGS map** (7.5 or 15 minute series) indicating the property's location.
- A **Sketch map** for historic districts and properties having large acreage or numerous resources.

Photographs

Representative **black and white photographs** of the property.

Additional items

(Check with the SHPO or FPO for any additional items)

Property Owner

(Complete this item at the request of SHPO or FPO.)

name U.S. Army Corps of Engineers - Rock Island District

street & number Clock Tower Building telephone 309-794-5185

city or town Rock Island state IL zip code 61204-2004

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Projects (1024-0018), Washington, DC 20503.

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National Park Service****National Register of Historic Places
Continuation Sheet**Section number 7 Page 1

Old State Quarry, Johnson County, Iowa

The Old State Quarry (also known as the "Old Capitol Quarry," "Capitol Quarry," or simply as the "State Quarry")¹ exposes about 25 vertical feet of Devonian-age limestone strata along the west wall of the Iowa River valley, less than two miles northeast of the town of North Liberty, in Section 5, Penn Township, Johnson County, Iowa (see attached map). This site, and several smaller sites in the near-vicinity (Sections 5 and 8), were quarried for dimension stone primarily during the mid-to-late 1800s, and were referred to collectively as the "North Bend Quarries."² The State Quarry represents the most extensive quarrying site, as well as the finest exposure of strata now assigned to the State Quarry Member of the Cedar Valley Group. The quarry is still accessible, primarily during periods when water levels in the now-adjacent Coralville Lake are at or below normal pool level. The nominated site is situated on Coralville Lake property, which is a U.S. Army Corps of Engineers flood-control and recreational reservoir. It is accessible by boat or by foot along a wooded path leading from the end of a private access road (Rice Ridge Lane NE) that extends through a housing development. The State Quarry is identified with "State Preserve Boundary" signs and an interpretive sign on the slope above the quarry. Based on photographs taken by State Geologist Samuel Calvin during the late 1800s, the primary quarry site has changed little in the past 100 years, with siltation having had the greatest impact on its present appearance, although this process helps to preserve and protect the site from weathering, erosion, and vandalism (see attached photographs). Evidence of nineteenth-century hand-quarrying activities can still be seen in the form of hand-drilled holes, some tooling marks, and a large waster pile that now armors the shoreline. Until just recently, there were still in place some of the "feathers," used to line the holes, and wedges, hammered between the feathers to split the stone into blocks (see photographs). Unfortunately, vandals have since removed these artifacts.

The Old State Quarry displays a sequence of fossiliferous limestone of uppermost Middle Devonian age (375 million years old). The limestone beds are dominated by skeletal and intraclastic grainstones and packstones displaying an abundance of brachiopod shells and crinoid debris. The fossils indicate that the State Quarry Member was deposited in shallow, marine environments. The State Quarry Member is geographically restricted to northern Johnson County. Stratigraphic relations in this small area clearly show that the State Quarry Member infills an ancient erosional channel that is incised into underlying Devonian limestones of the lower Cedar Valley Group (Little Cedar and Coralville formations). The State Quarry occupies a position near the center of this ancient channel-fill, where the limestones are dominated by skeletal grains and display evidence of vigorous bottom currents during deposition. Many of the skeletal grains were abraded by water current activity, and abundant crossbeds further attest to significant bottom currents in the central portion of the old State Quarry channel. The margins of the channel show different limestone facies, including abundant lime mudstones deposited in quieter environments.

The exposed section of limestone at the State Quarry is subdivided into several different intervals distinguished by their limestone lithologies (rock types) and fossil content (see attached stratigraphic diagram). The channel-fill limestones at the State Quarry contain an abundance of fossils, primarily crinoid and brachiopod material. Of particular interest is a thin limestone unit (0.8 ft) near the base of the quarry section that has been termed a "bone bed" or "fish tooth conglomerate" owing to the abundance of fish teeth and bone. This bed displays highly abraded fossil grains or larger clasts from crinoids, brachiopods, calcareous algae, colonial corals, and massive to branching

¹ Benjamin F. Shambaugh, *Iowa City: A Contribution to the Early History of Iowa* (Iowa City: State Historical Society of Iowa, 1893), 64.

² Samuel Calvin, "Geology of Johnson County," *Annual Report*, Volume 7 (Des Moines: Iowa Geological Survey, 1897), 72.

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National Park Service**

National Register of Historic Places Continuation Sheet

Section number 7 Page 2

Old State Quarry, Johnson County, Iowa

stromatoporoids along with common chert pebbles and grains. The bed may represent, in part, a reworked lag along the base of the channel. The abundance of bone attracted attention from early paleontologists, among whom Charles R. Eastman described twelve species of fossil fish from this bed. Dental plates from dipterids (lungfish) and bony armor (arthrodires) are also noted. Literally thousands of fish plates have been collected from this bed.

Overlying beds (see diagram) at the State Quarry are dominated by crinoid- and brachiopod-rich abraded-grain packstones and grainstones with varying amounts of carbonate mud, rounded limestone pebbles, abraded stromatoporoid branches (sponge-like animals), and corals. Crossbedding is common. The "Lower Lentil" interval occurs in beds up to four feet thick, and forms the primary quarry layers for dimensioned building stone. Calvin noted: "the building stone [from the State Quarry] in point of durability and ease of cutting is unexcelled."³ The quarry is capped by wooded and overgrown Quaternary sediments (presumably glacial till and loess). The geologic significance of the Old State Quarry site was affirmed in 1969 when it was designated as a State Geological Preserve by the State Preserves Advisory Board. This designation recognizes the site's significance as the geologic type-section of the State Quarry Limestone and the historic role it played in providing building stone for construction of the Old Capitol in Iowa City and the present Capitol in Des Moines.

While there are additional, smaller quarry sites in the vicinity that were related to the operations referred to collectively as the North Bend Quarries, those sites are not included in the present nomination because of the paucity of documentation related to their individual histories as quarry operations and as sites for geological research. In the event that additional documentation is discovered, a district nomination, including the Old State Quarry as a contributing site, should be considered.

³ Calvin, "Geology of Johnson County," 97.

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Old State Quarry, Johnson County, Iowa

Introduction

The Old State Quarry is a significant site at the state level under Criterion A in the history of geology in the United States for the role that this exposure played in the development of geologic and paleontologic ideas of the Devonian Period of earth history in the central North American continent. The site is also historically important because it was the source of durable limestone building materials which played a vital role in the construction of the Iowa Territorial Capitol Building, the Iowa State Capitol Building, the "Old Brick" Church in Iowa City, and other architectural features in eastern Iowa during the nineteenth century. The District also achieves significance under Criterion B for its association with former State Geologist, Samuel Calvin, who described and photographed the State Quarry in the late nineteenth century and used the quarry as a teaching aid for his geology courses during his tenure at the State University of Iowa (now known as the University of Iowa). The site has remained little changed since the turn of the century when quarrying activity ceased and still bears evidence of the hand-quarrying techniques. The geologic significance of the Old State Quarry was affirmed in 1969 with its designation as a geological preserve by the State Preserves Advisory Board. The site still attracts geologists because the rocks exposed there provide important lithologic and paleontologic data for interpreting local and regional stratigraphic relationships in the Devonian-age Cedar Valley Group. The period of significance for this site is from 1842 when the State Quarry was opened until 1911 when the quarry's use for geologic research and university instruction by Samuel Calvin came to an end with his death on April 17th of that year. Significant dates include: 1842, when quarrying activity was initiated at this site; 1874, when Samuel Calvin became a professor of natural history at the State University of Iowa in Iowa City and embarked on a career that would involve utilizing the State Quarry exposure for both research and instruction in geology and paleontology; and 1897, when the Old State Quarry was designated by then State Geologist, Samuel Calvin, as the type locality for the State Quarry Limestone.

Geologic Research History

The first geologic note of the State Quarry limestones appeared in Charles A. White's 1870 report on the geological survey of the State of Iowa.⁴ As eastern Iowa was further scrutinized by geologists from the State University of Iowa and the fledgling Iowa Geological Survey as well as other institutions in the state and nation, the exposures at the Old State Quarry became of special interest because of their contained fossils. Early descriptions of the rocks and fossils at the Old State Quarry were recorded by a number of well-known geologists including: Samuel Calvin, Charles R. Eastman, W. J. McGee, Thomas Savage, Charles W. Wachsmuth, Frank Springer, and Merrill Stainbrook. Large collections of fossils were recovered from the State Quarry Limestone in the late nineteenth to early twentieth centuries, primarily by Charles Belanski and Merrill Stainbrook. These are repositied in the collections of the University of Iowa, Geology Department, and the U.S. National Museum. Primarily through the studies of Charles R. Eastman, the State Quarry Limestone became renowned for its remarkably abundant fossil fish fauna. The bone bed has remained one of the most productive units for Devonian fish fossils in the world.

⁴ Charles A. White, *Report on the Geological Survey of the State of Iowa*, Volume II (Des Moines: Mills and Company, 1870).

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National Park Service****National Register of Historic Places
Continuation Sheet**Section number 8 Page 4 Old State Quarry, Johnson County, Iowa

The Old State Quarry was designated the type locality for a new geologic formation, the State Quarry Limestone, by State Geologist Samuel Calvin in 1897. The significance of the site particularly lies in its designation as a type locality, forming a permanent geologic reference for these strata. The early geologists who studied the Old State Quarry exposures helped formulate a basic understanding of Devonian history in the central North American continent and influenced later geologists by their careful descriptions. Studies of fish fossils collected from the Old State Quarry and elsewhere by Charles R. Eastman (of Harvard University, University of Pittsburgh, and the Carnegie Museum)⁵ underscored the popular label given to the Devonian Period--the "Age of Fishes." Although there was a considerable hiatus in geologic research on the State Quarry limestones between the 1920s and 1960s, the geologic significance of the site was underscored by renewed interest in the State Quarry Limestone over the past twenty-five years.

The pioneering studies by geologists in the late nineteenth to early twentieth centuries on the Old State Quarry exposures established the needed framework for further advancement in our understanding of the tropical seaways that covered much of the eastern and central United States during the Devonian Period. Exposures in the Old State Quarry locality represent one of the most convincing examples of Devonian tidal-channel sedimentation to be found anywhere in the world. The State Quarry limestones were deposited in a unique and instructive setting along the incised margins of a carbonate shelf complex that prograded from the north, recording the initial tidally-influenced deposits of a transgressing sea. Iowa occupied a geographic position in low southern latitudes under a tropical climatic setting when the Old State Quarry deposits were accumulating during the Middle Devonian. The instructive exposures at the locality provide a lasting record of bygone environments and extinct life that typified the vast interior seaways of the Euramerican continent about 375 million years ago.

Samuel Calvin

Samuel Calvin was born in 1840 in Wigtonshire, Scotland, where he lived until he was 11 years old at which time the family immigrated to the United States. They first lived in Saratoga, New York, before settling in Buchanan County, Iowa. In the early 1860s, Calvin entered Lenox Collegiate Institute in Hopkinton, Iowa, and later became an instructor at this institution. Following a stint in the 44th Regiment of the Iowa Infantry during the Civil War, Calvin returned to Lenox College where he was introduced to student, Thomas H. Macbride, who would become a well-known professor of botany at the State University of Iowa under Calvin's guidance, and to Dr. Charles A. White, then State Geologist and later a professor of geology at the State University of Iowa. When Dr. White resigned from the State University in 1874, Calvin succeeded him as professor of natural history. In 1892, Calvin was appointed the State Geologist when the state survey was reorganized and established permanently. "It was with this organization that his name first became known to the country at large."⁶ Calvin remained the State Geologist until 1904 when he resigned only to be reappointed in 1906. He served in this capacity until his death on April 17, 1911.

⁵ Charles Rochester Eastman, "Triassic Fishes of Connecticut," *State Geology and Natural History Bulletin* 18 (1911); William A.S. Sargeant, *Geologists and the History of Geology: an International Bibliography from the Origins to 1978*, Volume II (New York: Arno Press, 1980), 940-941.

⁶ Allen Johnson, editor. *Dictionary of American Biography*, Volume III (New York: Charles Scribner's Sons, 1929), 431.

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Section number 8 Page 5 Old State Quarry, Johnson County, Iowa

In 1887 Calvin relinquished his previous duty of curatorship of the “cabinet” (museum) at the State University of Iowa and formally took on the professorship of geology and structural zoology. In 1895 he became professor of geology and, in 1902, was formally installed as head of the State University’s Department of Geology. He received a Masters degree from Cornell College in 1874, a Ph.D. from Lenox College in 1888, and an LL.D. from Cornell in 1904.⁷ “These impressive certificates notwithstanding, his wide knowledge in the sciences was largely self-acquired.”⁸ It has also been noted that Calvin “brought to his work a critically keen judgment and an uncompromising allegiance to simple truth which made for thoroughness and accuracy.”⁹ In addition to his teaching and administrative duties, Calvin’s individual research “was largely paleontological and stratigraphic.”¹⁰

It is stated that he considered his discovery and proper interpretation of an interglacial mammalian fauna in the state as his most important contribution to science. In the course of his work, he described and named some thirty species of invertebrate fossils, and in turn had eleven species and varieties named after him by others. He was one of the founders of the *American Geologist* in 1888, and its editor-in-chief until 1894; a member of the Geological Society of America (president 1908); of the Paleontological Society of America; the American Association for the Advancement of Science and other scientific societies.¹¹

Also counted among his important contributions to the history of geology in the state was “his discovery of fish remains in the Devonian beds of Johnson County,”¹² including, most notably, those exposed in the Old State Quarry.

Calvin’s association with the State Quarry began in the 1870s when he became a professor at the nearby State University and likely through his association with Charles A. White, since Dr. White’s 1870 description was the first geologic note made of this quarry exposure. His association with this quarry continued through the end of the nineteenth century and probably up until his death in 1911, with Calvin using the quarry exposures for class field trips and geologic research. He was an ardent believer in the educational value of taking students into the field to experience geological phenomena first-hand and used the geological exposures “of the immediate neighborhood” of Johnson County for many of these excursions.¹³ One such field trip was photographed on April 22, 1899, showing Calvin and his wife, along with at least 36 male and female students at the State Quarry.¹⁴ Also significant was his designation in 1897 of this quarry as the type locality for the State Quarry Limestone.

After Calvin’s death in 1911, the use of the Old State Quarry for teaching and research declined until the 1960s when a resurgence of research interest has revived geological studies of this exposure and its fossil content. It may be that in the future the period of significance for the Old State Quarry nomination should be amended to include these modern-day studies.

⁷ John Thornton, “Samuel Calvin,” *State University of Iowa Centennial Memoirs*, Volume II (Iowa City: University of Iowa Press, 1947), 32.

⁸ *ibid.*

⁹ Johnson, *Dictionary of American Biography*, 432.

¹⁰ *ibid.*, 432.

¹¹ *ibid.*, 432.

¹² Thornton, “Samuel Calvin,” 44-45.

¹³ *ibid.*, 18; also personal communication with present State Geologist, Donald Koch, University of Iowa, Iowa City, 1996.

¹⁴ Calvin Photograph Collection, University of Iowa Department of Geology, Iowa City, Iowa.

**United States Department of the Interior
National Park Service****National Register of Historic Places
Continuation Sheet**Section number 8 Page 6 Old State Quarry, Johnson County, Iowa**Quarry History**

The Old State Quarry played an important role in the settlement history and architectural heritage of Iowa during the mid- to late nineteenth century. The location of the Iowa Territorial Capitol (now generally termed the "Old Capitol") was selected in 1839, and the accompanying settlement was named Iowa City by previous legislative decree (the Old Capitol building was listed in the National Register of Historic Places in 1976). The site of the Territorial Capitol was selected, in part, because of the availability of natural building stone in the Iowa River Valley. Initial quarrying of building stone for construction of the capitol building began in 1840 within the confines of Iowa City at the "Public Quarry" area north of the Old Capitol Building on the present-day University of Iowa campus. Early in 1842 William B. Snyder, newly appointed Superintendent of Public Buildings for the Iowa Territory, deemed the Public Quarry's stone unacceptable and began a search for a source of suitable stone. Soon thereafter he "succeeded in finding a fine bed of rock on the Iowa River, about ten miles northeast of the city, which presented a very promising appearance."¹⁵ This locality, initially referred to as the North Bend Quarries or as the Capitol or Old Capitol Quarry, later became better known as either the Old State Quarry, or more simply as the State Quarry. The North Bend Quarries included other several smaller quarries which are not included in the present nomination for lack of good documentation.

The bulk of building stone in the Old Capitol is clearly identifiable as hand-dimensioned State Quarry Limestone blocks. In 1870 Charles A. White, former State Geologist, identified the State Quarry and adjacent quarry workings as the source "from which the best of the stone was obtained of which the old State-House was built at Iowa City, the former capital of Iowa."¹⁶ Although the record of construction is not completely clear, between 1842 and 1846 a team of quarrymen produced hundreds of rough-hewn State Quarry Limestone blocks and transported them down-river on rafts for use in construction of the Old Capitol building.

Quarrying activity in and around the Old State Quarry continued from the 1840s through the 1860s, supplying building stone and foundation materials to several buildings in the Iowa City area. An architectural example from this era includes the beautifully dimensioned foundation stones for the "Old Brick" Church (constructed 1856-1865 and listed in the National Register of Historic Places). Samuel Calvin noted: "among the products of [the State Quarry] are bases for heavy monuments, blocks for bridge piers, curbstone, crossing-stone, and stone for ordinary building purposes."¹⁷ Many examples can still be seen in the Iowa City area. State Quarry Limestone curbing is still present throughout the "Northside Neighborhood" area, and a wall of beautifully dimensioned State Quarry Limestone is present along the T. Anne Cleary Walkway between Market and Burlington streets. The most extensive quarrying operations at the Old State Quarry were undertaken during the 1870s to supply foundation blocks for initial construction of the new State Capitol in Des Moines (also in the National Register of Historic Places). The Old State Quarry thereby holds the unique position of supplying critical building materials for both Iowa's Territorial and State capitols. Companies reportedly associated with the operations at this quarry include the Penn Quarry Company and D. A. Schaeffer.¹⁸

¹⁵ William B. Snyder, "Report of the Superintendent of Public Buildings," appendix in *Journal of the Council, Fifth Legislative Assembly of the Territory of Iowa 1842* (Davenport: Alfred Sanders, printer, 1843).

¹⁶ White, *Report on the Geological Survey*, 308.

¹⁷ Samuel Calvin, "The State Quarry Limestone." *Proceedings of the Iowa Academy of Science* 4 (1897) 16-21.

¹⁸ Interpretive information for the Old State Quarry Geological Preserve, Johnson County, Iowa.

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Old State Quarry, Johnson County, Iowa

Although the exact timing is not known with certainty, it appears that most or all quarrying activity at the Old State Quarry had ceased by the turn of the century. Hand tool marks, the presence (until recently) of in-place feathers and wedges, used to separate blocks from the live rock in hand-quarrying operations, as well as the dimensions of the quarry indicate that the quarry operations predated the mechanized techniques of the early twentieth century. This site has the potential ability to yield important information about hand-quarrying techniques of the nineteenth century; however, significance under Criterion D is not being claimed at this time.

The Old State Quarry is unique in its position as a significant geological and historical property linked to several historically important geologists, most notably Iowa geologist Samuel Calvin, as well as to several historically significant structures in the State of Iowa. Its renewed use for scientific research and education underscores the significance of this site and the need to preserve and protect it for future generations.

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(Note: * indicates materials examined at the Old Capitol Building (Iowa City), Archives Drawer 1839-1849, containing materials originally photocopied from the National Archives, Washington, D.C. Index number of source material on file also is given.)

- Anonymous editorial, "William B. Snyder, Superintendent of Public Buildings," *Iowa Standard*, March 12, 1842, 2.* (#87)
- Anonymous, "Construction of Old Capitol carried under many difficulties and 'red tape.'" *Iowa City Press-Citizen*, January 6, 1930, 6.* (no #)
- Anonymous, *History of Johnson County, Iowa, containing a history of the county and its townships, cities, and villages from 1836-1882*. Iowa City, 1883. Reprinted. Evansville, Indiana: Unigraphic, Inc., 1973.
- Bunker, B.J., G.A. Ludvigson, and B.J. Witzke, *The Plum River Fault Zone and the structural and stratigraphic framework of eastern Iowa*. Iowa City: Iowa Geological Survey, Technical Information Series 13, 1985.
- Bunker, B.J., and B.J. Witzke, "Cedar Valley Formation of the Coralville Lake Area, Iowa," in D.L. Biggs, ed., *North-Central Section: Geological Society of America, Centennial Field Guide 3*, 1987, 113-117.
- Bunker, B.J., and B.J. Witzke, *An upper Middle through lower Upper Devonian lithostratigraphic and conodont biostratigraphic framework of the Midcontinent carbonate shelf area, Iowa*. Iowa City: Iowa Department of Natural Resources, Geological Survey Bureau, Guidebook Series No. 16, 1992, 3-25.
- Bunker, B.J., B.J. Witzke, and J. Day, *Upper Cedar Valley stratigraphy, north-central Iowa, Lithograph City Formation*. Iowa City: Geological Society of Iowa, Guidebook 44, 1986.
- Calvin, Samuel, "The State Quarry Limestone," *Proceedings of the Iowa Academy of Science* 4, 1897a, 16-21.
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Verbal Boundary Description:

The boundary of the Old State Quarry is shown as the dotted line on the accompanying site plan map. Its legal location is as follows: SW 1/4, SW 1/4, NW 1/4, SE1/4, Section 5, T80N-R6W, Penn Township, Johnson County, Iowa.

Boundary Justification:

The boundary of the Old State Quarry conforms to the original, historic quarry area shown in Samuel Calvin's 1896 photograph and physically evidenced by the quarry cut into the valley slope adjacent to the shoreline of the normal pool level of Coralville Lake.

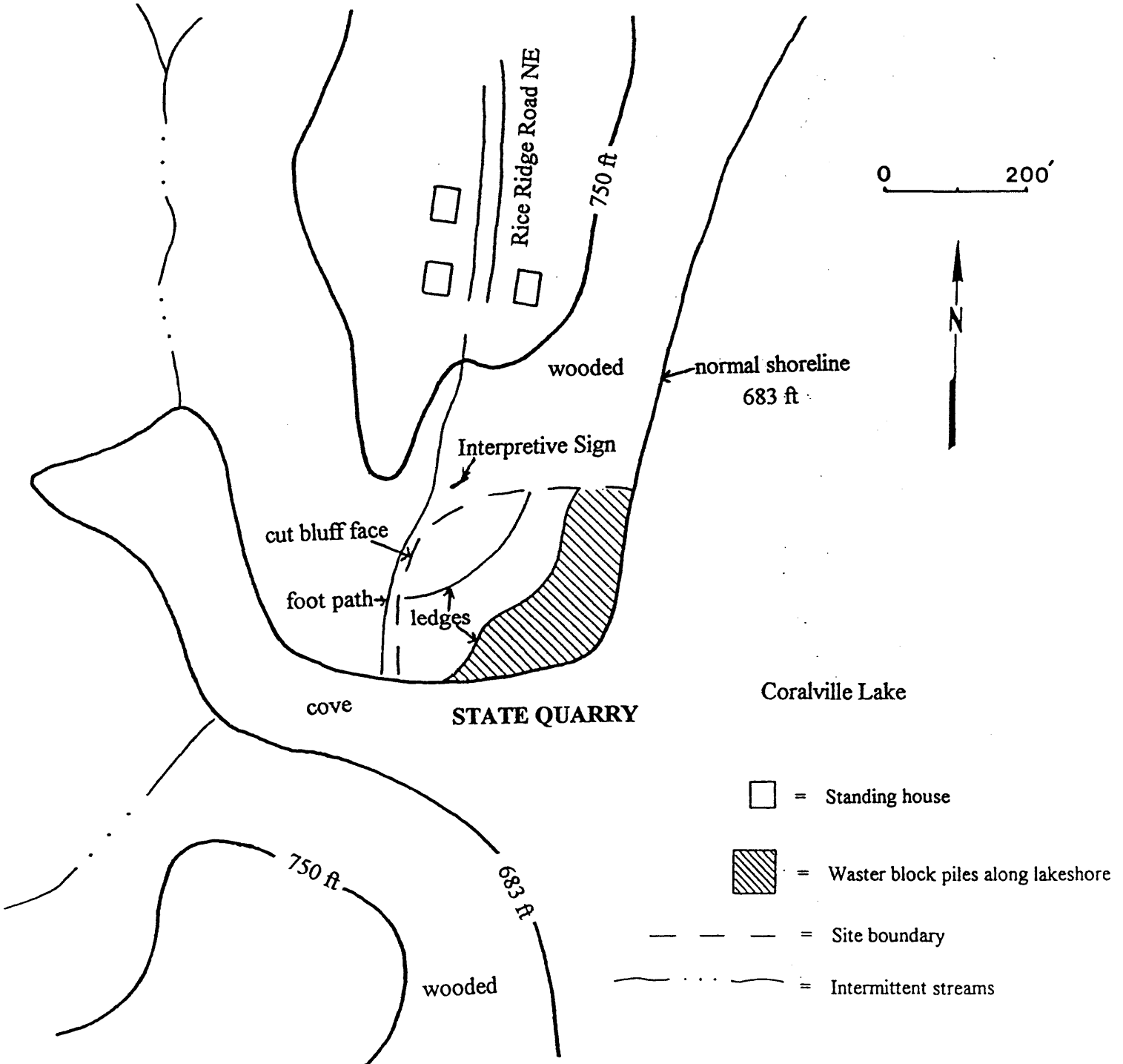
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Sketch Map of Old State Quarry Site



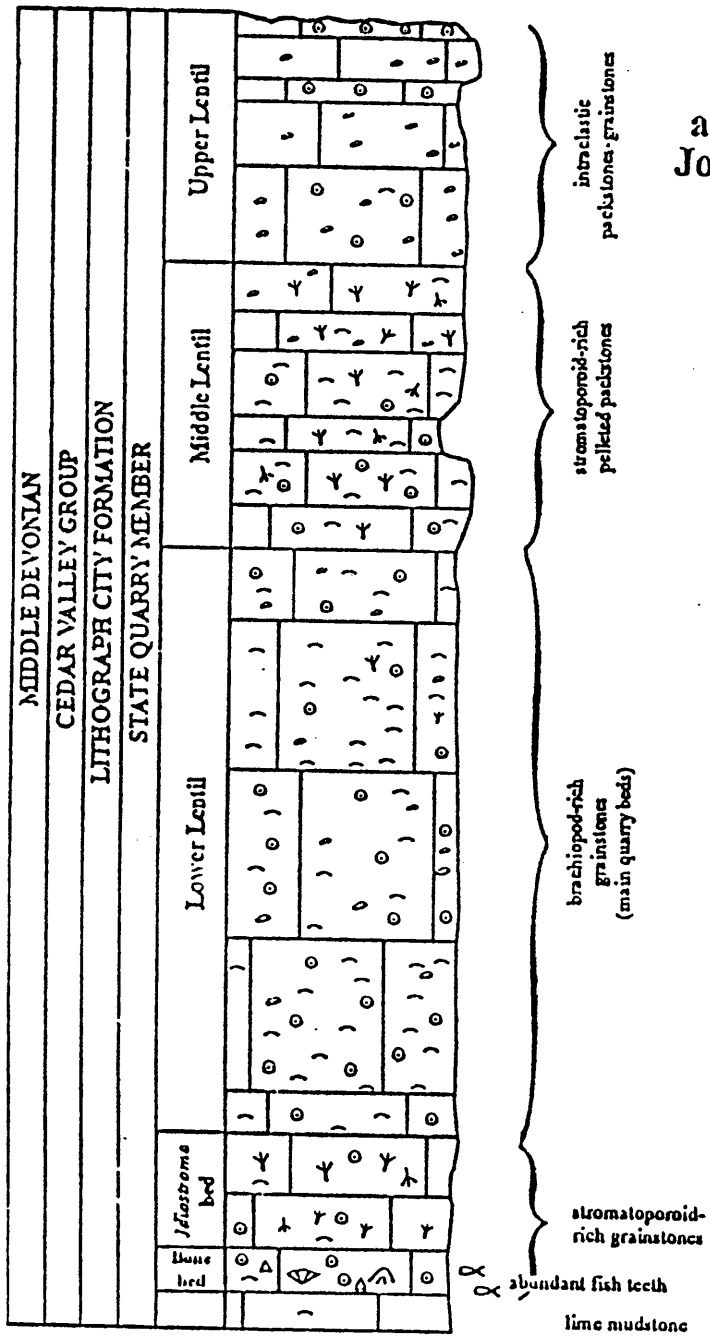
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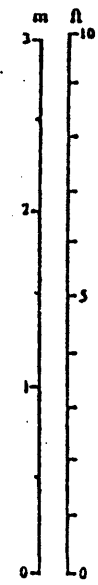
Stratigraphic Diagram of Old State Quarry



Graphic Section of the Geology at Old State Quarry, Johnson County, Iowa

Section derived from
Michael G. Watson (1974)

- KEY:**
- ⌋ brachiopods
 - ⊙ crinoid debris
 - ⌋ branching stromatoporoids
 - ⌋ massive stromatoporoids
 - ⌋ colonial corals
 - ⌋ fish fossils
 - ⊙ intraclasts
 - △ chert pebbles/grains



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Photographs:

#1

Photographer Leah D. Rogers
Date of Photograph August 29, 1996
Location of Negative Geological Survey Bureau, Trowbridge Hall, University of Iowa, Iowa City
View General view of State Quarry, View to the NW

#2

Photographer Leah D. Rogers
Date of Photograph August 29, 1996
Location of Negative Geological Survey Bureau, Trowbridge Hall, University of Iowa, Iowa City
View General view of State Quarry, View to the North

#3

Photographer Leah D. Rogers
Date of Photograph August 29, 1996
Location of Negative Geological Survey Bureau, Trowbridge Hall, University of Iowa, Iowa City
View East edge of State Quarry, View to the NNE

#4

Photographer Leah D. Rogers
Date of Photograph August 29, 1996
Location of Negative Geological Survey Bureau, Trowbridge Hall, University of Iowa, Iowa City
View East edge of State Quarry, View to the NE

#5

Photographer Leah D. Rogers
Date of Photograph August 29, 1996
Location of Negative Geological Survey Bureau, Trowbridge Hall, University of Iowa, Iowa City
View General View of State Quarry, View to the SW

#6

Photographer Leah D. Rogers
Date of Photograph August 29, 1996
Location of Negative Geological Survey Bureau, Trowbridge Hall, University of Iowa, Iowa City
View Close-up of quarrying marks on blocks at State Quarry, View to the SW

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Photographs continued:

#7

Photographer Jean C. Prior
Date of Photograph Fall 1993
Location of Negative Geological Survey Bureau, Trowbridge Hall, University of Iowa, Iowa City
View Close-up of hand-drilled holes (vertical grooves) at State Quarry, View to the West

#8

Photographer Jean C. Prior
Date of Photograph Fall 1993
Location of Negative Geological Survey Bureau, Trowbridge Hall, University of Iowa, Iowa City
View Close-up of hand-drilled holes showing wedges and feather in place (upper right and lower left) at State Quarry, View to the West

#9

Photographer Martha Maxon
Date of Photograph March 1993
Location of Negative Geological Survey Bureau, Trowbridge Hall, University of Iowa, Iowa City
View Close-up of wedge and feather liner in drill hole at State Quarry, View to the West

#10

Photographer Samuel Calvin
Date of Photograph December 1896
Location of Negative Department of Geology, University of Iowa, Iowa City
View General view of State Quarry, View to the North

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Old State Quarry, Johnson County, Iowa

Sketch Map of Old State Quarry Showing Photograph Directions

