



A DESCRIPTION AND CONDITIONS SURVEY  
OF THE  
MONASTERY BUILDING OF THE  
FORMER AUGUSTINIAN HERMITAGE OF SANTA LUCIA  
LOCATED ON THE SPANNOCCHIA ESTATE  
ROSIA, ITALY



Cover photos:

Top - Remains of north nave wall and apse wall of third church of Santa Lucia with adjoining monastery building that was converted to a casa colonica

Bottom - West facade of casa colonica showing gothic arcade

A DESCRIPTION AND CONDITIONS SURVEY  
OF THE  
MONASTERY BUILDING OF THE  
FORMER AUGUSTINIAN HERMITAGE OF SANTA LUCIA  
LOCATED ON THE SPANNOCCHIA ESTATE  
ROSIA, ITALY

Prepared by  
Participants in  
"PRESERVATION PRACTICE IN ITALY"

Co-sponsored by the  
Graduate Program in Historic Preservation  
University of Pennsylvania  
and  
The Etruscan Foundation

Summer 1987

## TABLE OF CONTENTS

LIST OF PHOTOGRAPHS	iv
ACKNOWLEDGEMENTS	v
SUMMARY	vi
INTRODUCTION	1
Terms of Reference	1
Participants	1
Information Used	2
Inspections	2
Documentation	2
Historical Summary	3
Description of Site and Building Complex	5
DESCRIPTION OF MONASTERY BUILDING OR <u>CASA COLONICA</u>	8
General	8
West Facade	8
North Facade	10
East Facade	10
South Facade	11
Unidentified Building Attached to Northwest Corner	11
Ground floor, Interior	12
Upper floors, Interior	13
Roof	14
Decorative Features	15
CONDITIONS REPORT	17
Site	17
Monastery Building or <u>Casa Colonica</u>	17
Cracks	17
Render, Mortar, Stone	18
Floors and Ceilings	19
Roof	19
Humidity	20
MONITORING	22
Structural	22
Humidity	23
ANALYSES	24
Mortar	24
Render	25
CONCLUSIONS	26
Chronology	26
Structural Stability	29
RECOMMENDATIONS	
Immediate	31
Urgent	32
Necessary	33

PHOTOGRAPHS	35
APPENDICES	
Appendix A: Chronology and History of Santa Lucia	41
Appendix B: Site Map	50
Appendix C: Building Plan	51
Appendix D: Intrados Decorations	52
Appendix E: Demec Readings	53
Appendix F: Humidity Grid and Fresco Remains	62
Appendix G: Render Samples	63
Appendix H: Syllabus of "Preservation Practice in Italy"	64
BIBLIOGRAPHY	75

# LIST OF PHOTOGRAPHS

Photo 1.	Santa Lucia monastery building/ <u>casa colonica</u> , west facade	35
Photo 2.	Gothic arcade of west facade of <u>casa colonica</u>	35
Photo 3.	North facade of <u>casa colonica</u>	36
Photo 4.	East facade of <u>casa colonica</u> , northern end	36
Photo 5.	Ruins of third church of Santa Lucia and southwest corner of <u>casa colonica</u>	37
Photo 6.	South facade of <u>casa colonica</u>	37
Photo 7.	West facade of <u>casa colonica</u> and unidentified building at the northwest corner	38
Photo 8.	Northern arch of arcade of west facade that leads to interior staircase	38
Photo 9.	Ashlar walls of second floor, southeast corner of <u>casa colonica</u>	39
Photo 10.	Ashlar walls of first floor, southeast corner of <u>casa colonica</u>	39
Photo 11.	A-frame trussed roofing structure, south end	40
Photo 12.	Carved wooden corbel of trussed roof structure	40

## ACKNOWLEDGEMENTS

The following survey could not have been undertaken without the expert instruction and advice of Jeanne Marie Teutonico of ICCROM, Rome, coordinator and lecturer for "Preservation Practice in Italy," taught at the Castello di Spannocchia during the summer of 1987. We owe her much appreciation for creating a stimulating program and for sharing with us so much of her own expertise. Our gratitude is also extended to the many other guest lecturers who participated in the course, and especially to Alejandro Alva of ICCROM, who, as a frequent faculty member during our six week stay, taught us how to use the tools of a building surveyor's trade both in the classroom and at the site.

The location of the course on the Spannocchia estate, of which the Santa Lucia site is only a small part, was made possible through its owner, Count Ferdinando Cinelli, and the Etruscan Foundation. Count Cinelli shared with us the history of Spannocchia and the monastery, and he also guided us over the proper paths, through the artifacts in his museum, to the critical books in his library, and through translations of Italian documents. For his help and the chance to enjoy the beauty of Tuscany at Spannocchia we thank him.

Final appreciation goes to David G. De Long, Chairman of the Graduate Program at the University of Pennsylvania and to the Kress Foundation, New York, NY for the fellowship support that enabled so many students to participate in the first "Preservation Practice in Italy" course.

The Santa Lucia Team

## SUMMARY

This report synthesizes the findings of a conditions survey of the buildings and site of the Augustinian Hermitage of Santa Lucia, Rosia, Italy, undertaken by participants in the "Preservation Practice in Italy" course co-sponsored by the Graduate Program in Historic Preservation of the University of Pennsylvania, Philadelphia, PA, and the Etruscan Foundation, Milton, MA, during the summer of 1987. The Santa Lucia complex--a registered Italian historic site used for religious purposes from at least the 10th century until the end of the 18th--consists of a former Augustinian church and a monastery building with attached structures in various states of ruin. It is located in a corner of the Spannocchia estate owned by Count Ferdinando Cinelli of Rosia and Grosse Pointe, Michigan.

The site was studied as a course exercise and did not constitute a formal project with a budget or a client. Rather, the objective was to document the history and present condition of the site (to the extent possible given time constraints and limited access to primary and secondary materials), and to make recommendations for the conservation of the buildings and land. The project team focused primarily on the monastery and its adjoining buildings, since these were the most intact. While the data gathered should be viewed as a foundation for further study, the recommendations are intended as guidelines for both immediate and future action.

Project team members visited Santa Lucia on many occasions between July 25 and August 30, 1987, either over the approach from the Ponte della Pia and up the old medieval road bed or down the mountain from the Castello di Spannocchia. The promontory and terracing, which extends below the site toward the river, and the hermit's cave farther up the mountain, were explored as well. In the monastery buildings, inspections were carried out for all rooms,

floors, and ceilings. Access to certain areas was not possible as some roofs were out of reach and vegetation obscured portions of facades and virtually all of the archaeological excavation sites of the cloister and the church. Photographs of the buildings and site were taken, some of which accompany this report. Humidity readings were recorded in selected rooms and certain structural cracks were monitored. In addition, four mortar samples were analyzed for contents and specially chosen plaster samples were prepared as thin sections and examined under a microscope. Finally, a general survey of the conditions of the buildings was conducted; a summary of these observations constitutes the main body of this report.

The findings, though preliminary, illustrate the plight of the Santa Lucia complex: it continues to suffer from neglect and remains vulnerable to water and insect incursions as well as the caprices of vandals. As a registered historic property, the site demands a positive plan of action if it is to be preserved and safeguarded for future generations.

## INTRODUCTION

### Terms of reference:

This report was carried out as a class project by seven members of "Preservation Practice in Italy," a summer course offered by the Graduate Program in Historic Preservation of the University of Pennsylvania, Philadelphia, Pennsylvania, and held at the Castello di Spannocchia in cooperation with the Etruscan Foundation, Milton, Massachusetts, from July 19 through August 30, 1987 (see Appendix H, SYLLABUS AND FACULTY).

### Participants:

Thomas Berentes, B.A., Cornell University

John Fawcett, A.B., Brown University

Lauren McCroskey, M.S. candidate in Historic Preservation,  
University of Oregon

Sharon McHugh, M.C.P. and M.S. in Historic Preservation candidate,  
University of Pennsylvania

Maree Lee Smith, M.A. candidate in Art History, University of  
Arizona

Leslie Ullman, M.S. candidate in Historic Preservation,  
University of Colorado

Jean Wolf, Certificate in Historic Preservation candidate, University  
of Pennsylvania

Information Used:

- . Available maps of the Spannocchia estate
- . Archaeological excavation grid map of 1974 showing the church, cloister, and floor plan of the monastery buildings (Radan & Lengyel, 1974a)
- . Scrapbooks of the Etruscan Foundation in the museum on the Spannocchia estate
- . Bibliographical material listed in the BIBLIOGRAPHY

Inspections:

All buildings (excluding the church remains) were inspected from floor level between July 25 and August 30, 1987. Access to roofs, ceilings, and below ground structures was not possible. Foliage and vegetation sometimes prevented clear access to an entire facade. Archaeological excavations, church foundations, retaining walls, and garden areas were covered with overgrowth and not examined or surveyed. With the help of Count Ferdinando Cinelli, the site of the hermit's cave was located and briefly examined, but no investigation or documentation was carried out.

Documentation:

General historical background on the development and growth of the early hermitage into an Augustinian church and monastery complex was obtained from the secondary literature immediately available at Spannocchia and listed in the BIBLIOGRAPHY. This includes published articles of the archaeological teams that worked on the site between 1969 and 1974, field notebooks and excavation reports in the Etruscan Foundation Museum and the main office of the villa, and

books available in Count Ferdinando Cinelli's library. A consolidation of the critical historical facts in relation to the construction and destruction of the building complex has been compiled from these sources and is listed in Appendix A, CHRONOLOGY AND HISTORY OF SANTA LUCIA. This information is not complete and should be verified further. Thorough research of primary sources in archives and libraries must be carried out to properly document the religious history of the site and the construction history of the buildings. To provide a historical context for the structural survey, a brief historical summary of present findings is provided below.

Historical summary (see Appendix A for full documentation):

The Augustinian Hermitage of Santa Lucia located on the Spannocchia estate in Rosia, southwest of Siena, probably originated as a romitoria (hermitage) well before the 10th century. Purportedly, as early as the 4th century hermits from Africa serving as missionaries settled in the Tuscany area. These hermits were known to live in caves, and about 500 meters east of the remaining hermitage building complex a cave has been located. A preliminary archaeological excavation in the cave exhibited no significant finds (see "Excavation Report," Barnes 1974, museum scrapbook), but excavations at the building site show the existence of a burial ground (campo santo) with skeletons dating at least back to the 10th century.

The Hermitage of Santa Lucia has been referred to historically since at least 1200 AD. It was officially designated as an Augustinian Hermitage under the Great Union of monastic orders in 1256. Prior to that it had already been cited in connection with Augustinian Friars. In 1785 its life as a monastic complex came to an end under the suppression of Joseph II.

Archaeological excavations carried out between 1969 and 1974 on the site included the cloister area in front of the extant monastery building and the foundation and remains of the church. The evidence from the excavations indicates that two earlier church foundations existed under the extant church remains. Of the three churches built, the first two were probably destroyed by fire. A cloister and monastery building apparently existed with the second and third churches. The extant monastery building is an altered version of what was attached to the third church, and appears to contain remnants and stones from the second, though no clear chronology of construction has been established. The purported dates of construction for the churches established by the archaeologists are:

SANTA LUCIA I	ca. 950
SANTA LUCIA II	after ca. 1010
SANTA LUCIA III	between ca. 1256 and 1270

The demise of the last building complex--SANTA LUCIA III, the cloister and the monastery--has not been fully documented and would be helpful to know for a full understanding of the structures that remain. Some destruction may have occurred under the condottiere John Hawkwood in the 1380s; after the church fell into disuse at the end of the 18th century further plundering took place.

By the beginning of the 19th century the remaining monastery building with its attached structures was referred to as a casa colonica (farm house), a function it served until the late 1940's. During its use as dwelling for tenant farmers (five "apartments" are still evident, but no electricity, water supply, or sewage system exists on the site), many changes were made to the original monastery structure and the church ruins were used as a resource for construction materials. Since 1945 the site has been uninhabited and untended.

Description of Site and Building Complex:

The remains of the Augustinian monastic complex of Santa Lucia and its purported hermit's cave are located in the Val di Mersa, 15 kilometers southwest of Siena and approximately three kilometers west of Rosia via Roccastrada SS 73. The site is in the northwest part of the Spannocchia estate of Count Ferdinando Cinelli of Rosia and Grosse Pointe, Michigan, and located on a promontory above the Rosia River gorge (see Appendix B, SITE MAP & BUILDING COMPLEX).

At present only pedestrian access to the area exists via various trails. Two trails have been clearly marked with the red and white blazes of the Italian Alpine Club. One leads up from Roccastrada SS 73 over the Ponte della Pia--an arched stone bridge attributed to the Romans but probably rebuilt during medieval times--and links with the remains of a stone paved road heading southeast and up the mountain. At a brick electrical tower it connects with a wider, unpaved road. Here one must follow a narrower trail northeast and farther up the mountain to the site. As one follows these paths, the river bed below and the terracing of the hillside above is clearly visible. Should one follow the wider, unpaved road southwest, rather than heading northeast, one would be following an overgrown vehicular way used when the terraces were still farmed. This stops at the main road leading to the Spannocchia villa.

The second trail leads north down the mountain from the Castello di Spannocchia. This path starts as a former road bed, which can be approached through the woods northeast of the courtyard or via the farm road behind the tower. From the latter, a sharp left at the blaze leads through trees down to the overgrown road. A marked fork off this road continues a gentle downward

downward slope and then becomes a narrow switch-back path down a steep grade that follows a stream bed. Eventually the path reaches the garden area east of the monastery building. A fork off this path, before the grade becomes especially steep, crosses the stream and follows a less-traveled trail farther northeast to the hermit's cave.

This cave is a large opening and depression in the hillside that faces north or is to the right off the trail. Specific measurements were not taken, but the depth of the cave from floor to highest roof point is probably about 5 meters. The widest portion is approximately 7 meters across, but narrower at the opening. The distance from the entrance to the back of the cave is in the range of 4 meters. An archaeological pipe grid was once fixed into the roof of the cave, but is now loose. The geological formation was not studied, but highly moist, cool conditions are readily apparent, enticing the growth of considerable moss at the mouth of the cave and speleothems on the roof. The floor is stone and earth and contains one rectangular pit excavated by the archeologists.

About 500 meters southwest of the cave and farther down the hillside is the flat promontory that juts out from the side of the hill and accomodates the monastery and church. The extant buildings on this site form a U shaped complex open to the west around a courtyard that has been excavated and where evidence of a former cloister, several ossuaries, and a small underground chamber have been found. Many skeletons unearthed during past archaeological excavations in the cloister area show that it was used as a campo santo as early as the 900's. In 1987 it became clear that these excavations had never been backfilled, since they are now overgrown to the point of obscurity, causing a dangerous and unpredictable terrain.

At this writing, the remaining buildings include: the former three-story cut limestone and rubble stone monastery building that is the dominant rectangular volume oriented north-south and which forms the base of the U (Appendix B, No. 1); a single story unroofed building of undetermined function attached on the northwest corner of the monastery that forms the north side of the U (Appendix B, No. 2).; the roofless remains of the rectangular church structure which is positioned on an east-west axis and attached to the monastery at its southwest corner, creating the south side of the U (Appendix B, No. 3). The only tall section of this former Romanesque church that remains is the north apse wall (see Photos Nos. 5 and 6; Appendix C, BUILDING PLAN, Nos. 10 and 11). It provides evidence of the original construction materials--alternating brick and limestone layers--otherwise bearly discernible in the remaining two-meter-high foundation walls.

To the east of the building complex is a large overgrown garden area defined by a retaining wall to the south. Here, the east facade of the monastery building exhibits an exterior beehive oven attached to both the facade and to the south side of a single story shed roof room protruding from it. Above the retaining wall and back from the buildings, where the side of the mountain meets the promontory at approximately a 125 degree angle, the stream that adjoins the path down the hill creates a channeled spring after a rain. Seepage of water through the retaining wall, puddling of it at the southeast corner of the building, and drainage ruts along the foundation of the east facade of the monastery building, provide evidence that the stream is longstanding, though perhaps seasonal.

DESCRIPTION OF MONASTERY BUILDING OR CASA COLONICA

Refer to Appendix C, BUILDING PLAN for a volume drawing and floor plans of all floors of the building. Reference numbers on the plan relate to areas discussed in the text, structural locations that need monitoring or attention, and photographs included in this report.

General:

Measuring approximately 26 meters in length, 9 meters across, and 11 meters high, this three-story building features an Italian clay tile roof which is hipped at the north end and gabled with stone infill at the south. Presently defined within this main structure are fifteen room spaces, an east-west passageway on the ground floor, a stone staircase in the northern third of the building, and single story shed roof spaces attached to the east and north facades. Three types of construction material predominate: cut limestone, rough stone, and brick.

West facade:

On the west facade (Photo 1; Appendix C, BUILDING PLAN, volume drawing and No. 7) the ground floor exhibits rounded archways at the north and south ends that flank an arcade of three pointed arches. The first and second floors are articulated by rectangular window openings of various dimensions at the south end (two on the second floor, five on the first, but one is filled in) which are of stone or brick with wood lintels and sills. At an intermediary level between these openings four narrow, arched windows occur, three of which are nearly all bricked in. These and other visible additions and alterations

to the fenestration suggest that original floor levels and spatial aspects are no longer intact. Indeed, upon closer examination it appears that the earliest windows are the narrow arched ones, of which there were originally six, all evenly spaced across the facade. The remaining four exhibit limestone lugsills, beveled brick jambs, and limestone lintels beveled to an arched configuration. These windows also coordinate with the same window type and placement on the east facade. Added to the chaotic disposition of the two types of open or filled windows are scaffolding holes that occur at five different levels on the facade, but inconsistently, due to many alterations.

The distinguishing features of this building are the arches of the ground floor entrance ways (Photo 2; Appendix C, BUILDING PLAN, No. 8). The northern brick rounded arch (a replacement for an earlier stone one) opens into a passageway that runs the depth of the building and exits through an arch in the east facade. From the adjacent pointed arches, the facing voussoirs have all been plundered, causing gaps in the surface of the facade. The first and the northern most pointed arch opens on the interior staircase; the second and third pointed arches define a loggia area. The southern rounded arch consists of voussoirs of fine quality ashlar beveled in the manner of the round-headed lintels of the probable original windows. This arch leads into the southwest room adjacent to the church apse.

Above the arches and the last coursing of ashlar are a series of "consoles," protruding notched stones (two are visible in Photo 2) prepared to hold the beam of a roof system for the ambulatory of the cloister. About a half a meter higher, remains of a short pent eave of roof tile is evident.

Predominant exterior building materials of this facade include ashlar limestone reaching from the foundation of the structure to a single course

above the point of the three arches. The top half is coursed rubble stone, coursed brick at some window jams, and sections of erratic infill. Limestone blocks are used to define the northwest corner of the facade and the cornice under the roof.

North facade:

The north facade (Photo 3; Appendix C, BUILDING PLAN, No. 21) features a centrally located end chimney at roof level and four rectangular windows (two at the second floor level, two at the first). Attached to this facade is a single story shed roof addition that connects with the unroofed square structure at the northwest corner of the complex.

East facade:

The east facade of the main volume (Photo 4; Appendix C, BUILDING PLAN, No. 9) consists principally of uncoursed rubble stone and brick with ashlar corner quoins and cornice. It also exhibits and confirms the narrow round-headed type and placement of the presumed original windows of the west facade. Here four of the six have been bricked in. Both above and below these windows occur a pair of rectangular windows that serve the more recent floor levels. At the midpoint of this facade a one-story pent roof room is attached with an entrance on the north. Built into the south facade of this addition is the remains of a brick beehive oven. Two entrances to the main volume flank this addition: on the north is the rounded arch door of the passageway to the west facade; on the south, an entrance leads into an unwindowed room in the southeast corner of the building. A stone retaining wall about three meters in height projects at less than a 90 degree angle from the southeast corner of the

building and extends well into the garden area east of the casa colonica.

South facade:

The southeast corner of the casa colonica stands free, but the southwest corner is built into the north apse wall of the third church of Santa Lucia (Photo 5; Appendix C, BUILDING PLAN, No. 10). Only this wall of the church and a few meter's height of the other walls remain. The southern facade (Photo 6; Appendix C, BUILDING PLAN, No. 11) thus shows the contrasts in style and construction between the church and the monastery building. The distinctive feature of the church is a zebra pattern created by alternating courses of brick stretchers (4 in height) with limestone blocks. Corbelled brick and corbel arch springers on this side of the nave indicate a vaulted church. At the base of this facade a former window in the nave has been converted to a door that leads into the southwest room of the monastery. To the east of this portion of the ruin the same brick and limestone construction once formed a staircase, apparently entered from the east, that led to a door at the second floor level (Photo 6). The staircase is gone, but an opening exists (probably not the original) and leads to the second floor southeastern and western rooms. The roof, gabled at this end, is supported by rubble infill added above the original wall structure. A small window exists under the gable peak.

Unidentified building attached to northwest corner:

Attached to the northwest corner of the single story shed roof structure of the main building is a large skeletal, roofless building, roughly square in shape with wall heights the same as the pointed arches of the main facade (Photo 7; Appendix C, BUILDING PLAN, No. 15). Fragmented walls are composed of

rubble stone and brick with ashlar corner quoins. A rounded arched doorway of cut limestone exists in the southeast portion of the facade.

#### Ground Floor, Interior:

None of the ground floor rooms or spaces of the main building are interconnected; all must be entered from either the east-west passageway through the building or from the outside. The west facade has four different entries: the northern most is through the rounded arch into the east-west passage; the next (moving south) goes through the northern Gothic arch to the staircase leading to the upper floors (Photo 8; Appendix C, BUILDING PLAN, No. 12); the middle Gothic arch opens onto a loggia area, and the rounded arch to the south is the entrance to the southwest corner room attached to the apse of the church. A former window in the south wall of this room has been converted to a door that leads into the church apse. The south wall and the southwest corner of this room are of fine, carefully laid, limestone ashlar and may be the remains of the former sacristy of the church SANTA LUCIA II, to which SANTA LUCIA III was integrated. The facade walls of the monastery building are only abutted to this ashlar construction (Photos 9 and 10; Appendix C, BUILDING PLAN, Nos. 22 and 23).

On the east facade a doorway opens into the windowless southeast corner room. North of this opening is a single story shed roof addition with an entrance in its north wall and a disintegrating beehive oven structure built into the south wall. A rounded arch at the northern end of the facade leads into the east-west passageway. The latter has a door in the south wall leading into the large northeast room of this level. Two doorways on the north wall of

the passage (the north wall of the main volume) go into rooms of the single story pent roof structure at this end. These rooms have been divided with stone walls of about a meter and a half height into stable-like spaces.

#### Upper Floors, Interior:

Access from the ground floor to the upper two floors is through the northern most Gothic arch via a stone staircase (Photo 8). The two east-west walls of the staircase and a third east-west wall to the south divide the main volume of the casa colonica into thirds. None of these interior walls are integrated into the facade walls, they merely abut the external structure. Floor levels north of the staircase are located at lower heights than in the southern two thirds of the building and are reached by landings along the east wall. The floors south of the staircase are accessed by western landings higher than those to the east.

The first floor space north of the staircase has been divided into two rooms, the eastern most having a hooded hearth on the north wall and a built-in sink structure on the east wall. An attempt to divide the rectangular space in two on the second floor at this same end of the building is evidenced by remains of a paving brick partition that is now collapsing. No fireplace or sink occur in this space.

On the second floor south of the staircase only two rooms may be accessed from the stairway. The western room has a large hooded fireplace in the southeast corner and a built-in sink on the west wall. The eastern room is the smaller. The other two rooms on this level are entered from the missing exterior staircase on the south facade. They differ in that their interior wall is only about two and a half meters high in order to fit under a trussed,

mortice and tenon, A-frame roof structure (Photo 11; Appendix C, BUILDING PLAN, No. 13).

The first floor rooms accessible south of the stairs number four. The spaces and fireplaces are configured as the rooms on the second floor, but a doorway in the south wall of the west room provides access to the two rooms at the southern end of the building.

Interior walls of the building are composed of rubble stone, whole or broken ashlar blocks, and brick, as evidenced by the exposed staircase walls and the walls on the ground floor. The upper rooms are faced with render of various qualities and deterioration. Ceilings are of hewn or timber beams with thinner unhewn joists running perpendicular and spaced approximately 21 cm. apart. In several instances the orientation of the beams and joists is reversed in adjacent rooms. All floors except the top floor have double thicknesses of paving brick laid roughly parallel or in a herringbone pattern and secured by mortar between beds and joints (see Photo 10).

#### Roof:

The hipped roof (north end) and gable roof (south end) is composed of timber beams running north-south with a north-south ridge beam. The smaller joists run perpendicular. The hipped configuration has been achieved with diagonal timbers that extend from the corners and join the principal ridge beam. Flat paving tile is mortared together above the wooden roofing members.

The gable end of the roof is achieved by an A-frame truss construction used in the southern third of the building (Photo 11; Appendix C, BUILDING PLAN, No. 14). The truss is composed of hewn and rough timber and supported by carved scroll corbels embedded in the wall under the horizontal beams (Photo

12; Appendix C, BUILDING PLAN, No. 14). Paving tile above this section is merely laid, not mortared. Roofing tile completes the entire roof on the exterior.

Decorative Features:

Northeast ground floor room (Appendix C, BUILDING PLAN, Ground Floor,  
No. 20)

This room, entered from the east-west passageway, contains the only striking decorative feature in the main building. High on the east and south walls appears the remains of a wall painting of at least three rows of square, framed panels (Appendix C, BUILDING PLAN, Ground Floor, No. 5). The frame and central parts of the panel show at least three different colors (red, blue, and white; see Appendix F, HUMIDITY GRID & FRESCO REMAINS) and a sense of marbled coloration. The painted surface is spalling off the underlying plaster, a yellow, sandy compound (see ANALYSIS, Render and also Appendix G, MORTAR & RENDER SAMPLES).

The ceiling of this room and the landing of the staircase bisect the frescoes at ceiling height and at the north end of the room, indicating that the ceiling or first floor level and staircase are an alteration that took place subsequent to the wall painting.

Northwest ground floor loggia area (Appendix C, BUILDING PLAN, Ground  
Floor, No. 16)

This room, more open to the elements due to the arcade, has very little render on its stone walls, but may originally have had a continuation of the

fresco painted panels seen in the neighboring room. In the southwest corner at the ceiling, a small square of relief-like render in a geometric pattern is evident.

On the intrados of the arches of the arcade, fragments of coloration and incised patterns provide evidence of polychrome geometric decoration using medallions, florals, and quatrafoils (Appendix C, BUILDING PLAN, Ground Floor, No. 4 and Appendix D, INTRADOS DECORATIONS).

## CONDITIONS REPORT

Site

Weeds and vines have completely overgrown the entire site, seriously hampering complete investigation of all the building structures. The foundation walls of the church ruins are covered with growth, as are the fragmentary walls and the inside of the roofless structure at the northwest corner of the casa colonica. Underbrush north, east, and south of the main building made penetration and investigation of certain rooms, facades, the former staircase, and retaining wall prohibitive. The cloister area to the west is a maze of open but overgrown archaeological trenches that were left exposed after excavations in 1974. Deep, open ossuaries in this area and at the west entrance to the church are particularly dangerous.

Monastery Building or Casa Colonica

CRACKS (Appendix C, BUILDING PLAN, Nos. 1-3 and 16-18):

The main building appears sound at first glance, but has serious problems on its north facade. Cracks are apparent along the roofline extending downward near both the northeast and northwest corners. A large crack is also visible on the east facade, north end, showing that the north facade is leaning northward. To inhibit this movement, two iron tie rods have been placed at the east and west ends of the north facade. They extend through this facade, through the interior room and its south wall, and are fastened on the stairwell side of this wall. In addition, a recent crack that shows no mold growth was noted in the ground floor passageway underlying this section of the building. This crack may indicate a potentially dangerous situation and should be

monitored (Appendix C, BUILDING PLAN, No. 2).

Other cracks are confined to the interior east-west walls and are frequently associated with window sills and door lintels. One significant crack appears in the east-west (south) wall of the loggia room on the ground floor (Appendix C, BUILDING PLAN, No. 16). It runs the full height of the wall and is associated with an area 50 cm. square and 15 cm. deep that has missing stones. Evidence of the crack on the upper floors has not been found. This crack was monitored for a two week period with no significant activity (see MONITORING, Structural, below, and Appendix E, DEMEC READINGS). Other cracks noted on the building's surfaces are indicated as Nos. 1-3 on Appendix C, BUILDING PLAN; cracks that were monitored are Appendix C, BUILDING PLAN, Ground Floor, No. 16 and Second Floor, Nos. 17-18.

#### RENDER, MORTAR, STONE:

There is little evidence of any exterior facade render left on the building, which means all mortar joints and stone are exposed to the elements. Fragmentary patches of polychrome and render appear on the intrados of the gothic arcade, indicating that at one time this was covered with a decorative render. The facing voussoirs of these arches have all been plundered, exposing the inner, broken limestone to the weather.

Render on the interior walls on the ground floor is sparse, and that which remains is located in the upper portion of the northeast room where fresco remains have been identified on the east and south walls (Appendix C, BUILDING PLAN, Ground Floor, No. 5 and 20). A small amount of render occurs on the same south wall of the loggia area (No. 5). The render on the upper floors is more recent and complete and has suffered most from infiltration of rain water

through roof and window openings, causing stains, flaking, and fungus. See also ANALYSES, Mortar and Render, below, and Appendix G, RENDER SAMPLES.

#### FLOORS AND CEILINGS (Appendix C, BUILDING PLAN, No. 6):

The sense of movement and vibration throughout the building when walking on the floors and staircase landings indicates that unstable conditions exist. Serious problems due to damage in beams and joists from insects, dry rot, and wet rot are visible to the naked eye. Use of the building by bats, birds, and other forms of wildlife that enter through open doors and windows compound the situation further.

The insect activity has affected the structural integrity of the flooring in the first floor southwest room. Here, in the southwest corner, the joists have detached from the south wall and dropped down into the room below. At the ground floor level, a vertical prop has been placed under one of the major ceiling/floor beams in the northern half of the room, implying that instability exists overall (see Appendix C, BUILDING PLAN, Ground Floor and First Floor, No. 6).

Holes in the floor from missing or broken tiles are evident in many of the second floor rooms where the tile is only one layer thick. The holes may be the work of vandals or deterioration of the tile from water that has leaked through the roof and window openings.

#### ROOF (Appendix C, BUILDING PLAN, No. 19):

The roof of the main structure, as seen from inside, has some missing tiles and visible holes, especially around former chimneys, most of which have been covered over. The fireplaces have apparently been used despite the closed

flues, causing considerable blackening by soot of the inside of the roof in at least two of the rooms.

The shed roofs of the one-story appended structures are all deteriorating due to vandalism, vegetation, humidity, and broken rafters. While much tile can be salvaged from these roofs, the structural members will have to be replaced.

#### HUMIDITY (Appendix C, BUILDING PLAN, No. 20):

Moisture problems exist in all the ground floor rooms, but are most evident in the rooms on the eastern side of the building where dispersed water from a stream runoff on the hillside to the south infiltrates through the ground. The southeastern most room is continually dank and humid with much mold and fungus growing on the walls. When monitored at random with a protimeter, the walls always showed 100 percent humidity.

The adjoining northeastern room, which is behind the one-story shed roof room whose roof is covered with much vegetation, also shows a high humidity count. This room contains the remaining frescoes in the structure, and the high level of moisture in the walls, carrying salts that are deposited on the surface, endanger the frescoes and the masonry itself. Monitoring the humidity over a period of two weeks regardless of the weather (see Appendix F, HUMIDITY GRID & FRESCO REMAINS), using a protimeter on a roughly laid out grid system on the east wall, proved that the moisture content was at a maximum from the floor to the ceiling.

It should be noted that because no window or door closures exist in the building, moisture penetrates through the structural openings whenever it rains. This, as well as leaks from the roof, cause ongoing water problems on

the walls, floors, and ceilings throughout the building.

## MONITORING

Structural (Appendix C, BUILDING PLAN, Nos. 16-18, and Appendix E,

## DEMEC READINGS)

Three cracks were chosen in the main building of Santa Lucia to establish preliminary monitoring points for assessment of building movement and stability. Monitoring was carried out between August 10 and August 25, 1987 with five readings completed at site No. 1 and four completed at sites Nos. 2 and 3.

The process for monitoring involved cementing three metal discs on the surface of the wall to form an equilateral triangle across each crack. Measurements of the distances between the discs were made with a strain-gauge known as a DEMEC gauge. DEMEC readings were taken in conjunction with temperature and humidity readings and recorded with diagrams of the cracks as found in Appendix E.

For the short period of time in which the readings were taken, the variations were not significant and were probably caused by weather and thermal conditions. Readings should be taken over a longer period in order to be conclusive and final corrections and calculations should be completed. The most significant crack monitored was No. 1 (Appendix C, BUILDING PLAN, Ground Floor, No. 16). It extends nearly the full height of the south wall of the loggia room. It should continue to be monitored due to its external exposure and size. Cracks Nos. 2 and 3 (Appendix C, BUILDING PLAN, Nos. 17 and 18) located in the second floor north room are related to window openings and sills and are probably less significant, but No. 3 may extend to the floor below and be associated with a crack visible on the north facade (Appendix C, BUILDING

PLAN, No. 1 at northwest corner).

Humidity (Appendix C, BUILDING PLAN, Ground Floor, No. 20 and Appendix F,  
HUMIDITY GRID AND FRESCO REMAINS)

The ground floor rooms on the east side of the casa colonica give immediate evidence of humidity problems through the dampness felt upon entrance. In the case of the southeast room, the moss growing on the stones and water seeping through the retaining wall of the garden outside the room's doorway provide final proof of humidity.

The stream that has served the Santa Lucia site throughout its history runs down the hillside south of the church and makes itself evident where the land plateaus and near the apse end of the church. After a heavy rain, the stream provides a continual trickle of water that is channeled in a hollow log and then runs westward along a stream bed at the juncture of the plateau and hillside. Seepage from this stream at the apse end of the former church goes through the ground and the retaining wall east of the church and casa colonica. A stone drainage ditch at ground level along the southeast facade provides evidence that the flow of water must have been a normal occurrence. Archaeologists have also reported the existence of three different water systems throughout the site as well as a pool ("Excavation Report," July 1974, museum scrapbook).

The humidity of both the northeast and southeast rooms on the ground floor are affected by this water flow. The northeast room that contains frescoes was monitored with a protimeter to determine the humidity levels (Appendix C, BUILDING PLAN, Ground Floor, No. 20). Short of an area around a partially blocked window in the east wall, all readings were at 100 (see Appendix F).

## ANALYSES

Mortar

Mortar samples were taken from four different sections of the building for analysis. Hydrochloric acid was added to a portion of each crumbled mortar sample and through weighing and filtering the percentages by weight of the constituents were established. The results indicate different mortar types and could provide clues to construction history.

Sample No. 1 came from the ground floor southwest room of the building and was taken from between ashlar limestone blocks in the southwest corner of the west facade. This portion of the facade might be a portion of the sacristy of the church of SANTA LUCIA II and thus the oldest section of the monastery building.

Sample No. 2 was taken from the ground floor northeast room, south wall below the frescoes.

Sample Nos. 3 and 4 came from the open loggia or northwest ground floor room. Number 3 was from the south wall, No. 4 from the east wall.

A comparison of the composition of the samples by weight is shown below:

	Sand	Fines	Binder (calcium carbonate)
# 1 (SW room)	65.4%	14.7%	19.9%
# 2 (NE room)	66.48%	9.89%	23.63%
# 3 (NW room)	52%	11%	37%
# 4 (NW room)	52%	14.6%	33.4%

While decisive conclusions may not be drawn from so few samples and the simple percentages, the similarity between the figures shown for samples Nos. 3 and 4, taken from the same room, imply that the walls may have been constructed with the same mortar mixture and thus within the same time period.

#### Render (Appendix G, RENDER SAMPLES)

Five samples of renders were taken from different wall surfaces of the main building and church: No. 1 from the south intrados of the northern most gothic arch of the west facade where some evidence of pigment in the render existed; No. 2 from the brick of the north nave wall of the church; Nos. 3 and 4 from the remains of a painted ornamental arch over the doorway (originally a window) in the north nave wall; No. 5 from the frescoes in the northeast room. Microscopic examination of thin sections showed the stratigraphy illustrated in Appendix G, RENDER SAMPLES. Colored pigments were seen in sample No. 1 (red) and No. 5 (blue)--both taken from areas where color was visible to the naked eye.

## CONCLUSIONS

### Chronology:

Today, the former monastery building of the Augustinian Hermitage of Santa Lucia remains the only intact structure of the final religious complex that was rebuilt during the middle of the 13th century on the Spannocchia estate. Within the limitations of the survey of this monastery completed during August 1987, archival documentation and research to establish its construction history was not possible. However, while carrying out the conditions assessment described on the preceding pages, certain aspects of the building's chronology seemed evident. These details are listed below with the hope that they will eventually be corroborated by documentary research to complete the full construction and alteration history of the Hermitage of Santa Lucia.

### PROBABLE EARLIEST EXTANT FABRIC OF THE MONASTERY BUILDING:

. The southwest, three story, ashlar limestone corner of the monastery attached to the apse wall of the church. According to archaeological reports, the sacristy of SANTA LUCIA II would have been located here. This small section of regular, finely cut, and tightly laid ashlar--distinctively different from other sections of the building--might thus be a remaining portion of SANTA LUCIA II. This section extends east on the south wall to the north-south interior wall; on the west wall it continues northward only

about a meter and a half. The church apse is integrated into the western half of the south wall and southwest corner of the monastery building. The west facade of the monastery merely abuts the ashlar wall (see Photos Nos. 9 and 10; Appendix C, BUILDING PLAN, Nos. 22 and 23).

- . The ashlar limestone of the west facade that extends one coursing above the pointed arches plus the quoins and cornice blocks on all facades. Perhaps these blocks remained from the destruction of SANTA LUCIA II and were reused for the main facade and more critical structural areas.

- . Rounded ashlar arches found in the west facade, east facade, and the south wall of the roofless northwest corner building.

- . Protruding "consoles" or notched stones on the west facade that may have held a beam for a roof over the cloister walk of both SANTA LUCIA II and III.

- . Rounded arched window lintels, lug sills, and jam bricks of the six narrow windows found on both the east and west facades.

- . Coursed rubble stone used on the upper portions of the facades.

- . Staircase structure (now missing) of brick and limestone built into the east apse wall of the church and leading into an upper floor level of the monastery building (but probably not at the present door opening).

PROBABLE LATER ADDITIONS AND CHANGES TO THE MONASTERY BUILDING:

- . The extant internal east-west walls and the one north-south wall were presumably added to the main facades at a later date, since all internal walls abut the facades and show no integration.

- . Frescoes painted on the east and south walls of the ground floor northwest room.

- . Pointed arches of west facade.

- . Polychrome decoration on the arches of the west facade.

ALTERATIONS TO CONVERT THE MONASTERY TO A CASA COLONICA:

- . Original floor level raised and second floor added, creating two levels in the southern two-thirds of the building that are higher than the two in the northern third.

- . Large interior staircase added.

- . New floor levels and staircase intersect earlier fresco decorations and narrow arched windows, causing many windows to be filled in.

- . New rectangular windows added using brick in the north, west, and east

facades due to altered floor levels; much brick infill used in all facades.

- . Additional room spaces created to achieve five different living areas on upper floors.

- . Roof altered at the south end by using a trussed A-frame structure and infilling the gable peak where church apse and roof had been. The north end of the roof has been maintained in a hip roof style.

- . Stys, troughs, and partitions added in ground floor rooms for animals.

#### RECENT DESTRUCTION:

- . Removal of the voussoirs and keystones of the three pointed arches.

- . Plundering of loose stones or removable architectural elements.

#### Structural Stability:

Centuries of use for sacred and secular purposes and the neglect of at least the past 25 years have taken their toll on this building and the remains of the adjoining church. The excavations of the cloister area and the church foundations of the 1970s have now also been abandoned. The site is readily accessible to vandals, animals, and the elements since the building openings

have no closures. Broken tile and roofing beams also allow water and moisture to penetrate. Unprotected and deteriorating stone and mortar and artistic architectural decoration such as the frescoes and polychrome paintings will proceed to disintegrate without conservation and consolidation.

As a registered Italian historic site, it is critical to conserve and maintain the remains of the Augustinian Hermitage complex of Santa Lucia in its historical setting on the Spannocchia estate before further decay occurs. To this purpose, the recommendations below are suggested.

# RECOMMENDATIONS

## IMMEDIATE for protection of structures from vandals and the elements:

1. Establish a maintenance log book to record all work of any type carried out at the Santa Lucia site.
2. Post private property signs at Ponte della Pia to discourage trespassers.
3. Post "No-trespassing" signs on all buildings.
4. Seal all doors and windows from trespassers and the elements using non-destructive techniques that do not create dangerous micro-climates. All installations should be reversible and should not trap humidity in the structures.
5. To avoid further water and humidity damage, repair or replace, where necessary, entire roof sections and leaking and damaged roof tiles on all roofs attached to the main building (exclude the one-story roofless northwest building).
6. Cut all trees and foliage to ground level around all structures and within unroofed structures. Maintain growth away from buildings a distance of at least one meter.
7. Consult with local archaeologists to consider proper conservation of the

previously excavated cloister and church site. Back filling of these areas is necessary to avoid hazardous walking surfaces. Sections critical to further investigation or of historical importance could be refilled temporarily or covered with proper viewing boxes for protection. Special consideration should be given to the three presently exposed and open ossuaries (the one at the west church entrance is now partly covered by broken, green plastic roofing material) and a small below-ground chamber with an arched roof.

8. Consult with an architectural conservator who is an expert in stone conservation to secure proper protection of extant church foundations and all exposed and unroofed walls of the church and monastery buildings.

URGENT for further stabilization and protection:

1. Under all weather conditions, assess the water flow from the mountain side south of the church with the intention of diverting or controlling the stream so that it does not flow through or under the southeast retaining wall to cause moisture problems in the rooms on the east side of the building.
2. Document and assess the remaining frescoes in the northeast ground floor room and the polychrome geometric designs on the pointed arches of the west facade for conservation or possible consolidation.
3. Assess and consider repointing deteriorating mortar joints of the facades with appropriate lime mortar (not Portland cement).

4. Place all significant stones and architectural building elements that are now in the ground floor rooms in a secure location so they will not be plundered. (The Museum at Spannocchia already has many important pieces from Santa Lucia and others could be added.) All pieces should be documented, labeled, and inventoried before removal.

5. Remove accumulated debris from all rooms and earth banked against walls of ground floor rooms.

NECESSARY before possible intervention:

1. Complete a set of measured drawings of the entire building complex.
2. Carry out structural monitoring of foundation, walls, and all major wall cracks as described above.
3. Check all interior non-integrated walls for lateral movement and stability.
4. Check iron tie beams in top floor north room for strength and stability. Make sure they are not causing further damage to the building.
5. Evaluate all wooden lintels and roofing and floor timbers for moisture, rot, and insect damage.

6. Evaluate all floor and ceiling brick for breaks, cracks, and stability.
7. Inspect and monitor all walls and floors for humidity problems, especially on the east side of the building, and correct accordingly.
8. Complete documentary and historical research on the church and monastery complex, including verification of material questioned in the historical chronology, below.
9. Carry out an archaeological investigation of all ground floor levels inside every building and in the garden area east of the main building in search of other artifacts, tombs, etc.
10. Complete a mortar and render analysis of the building to complement the documentary research and help establish a building chronology.

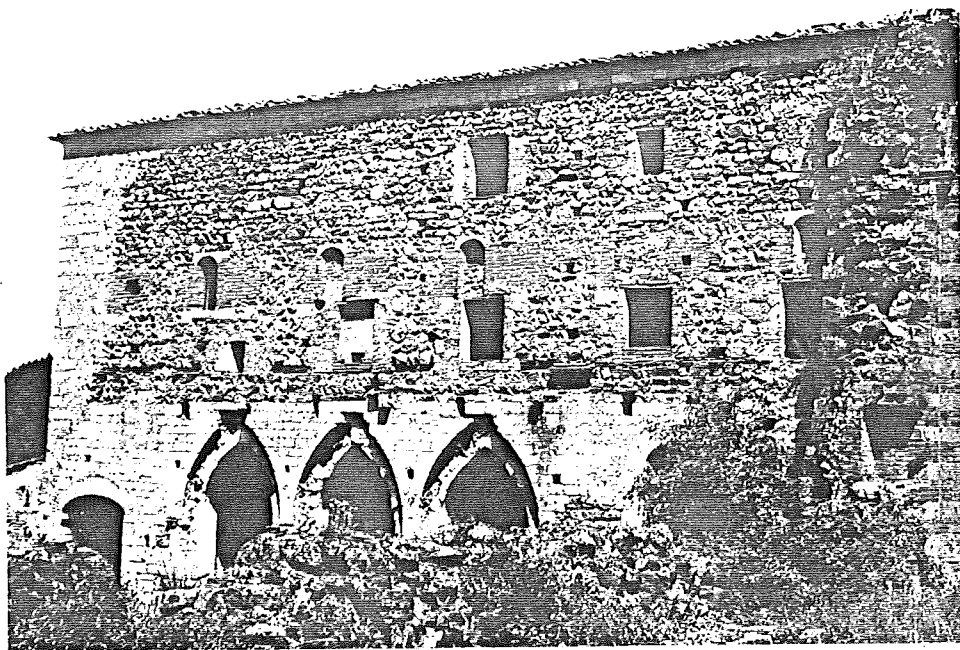


Photo 1. Santa Lucia monastery building/casa colonica, west facade, and foundation remains and corner of north apse wall of the third church of Santa Lucia (Appendix C, BUILDING PLAN, Nos. 7 and 10).

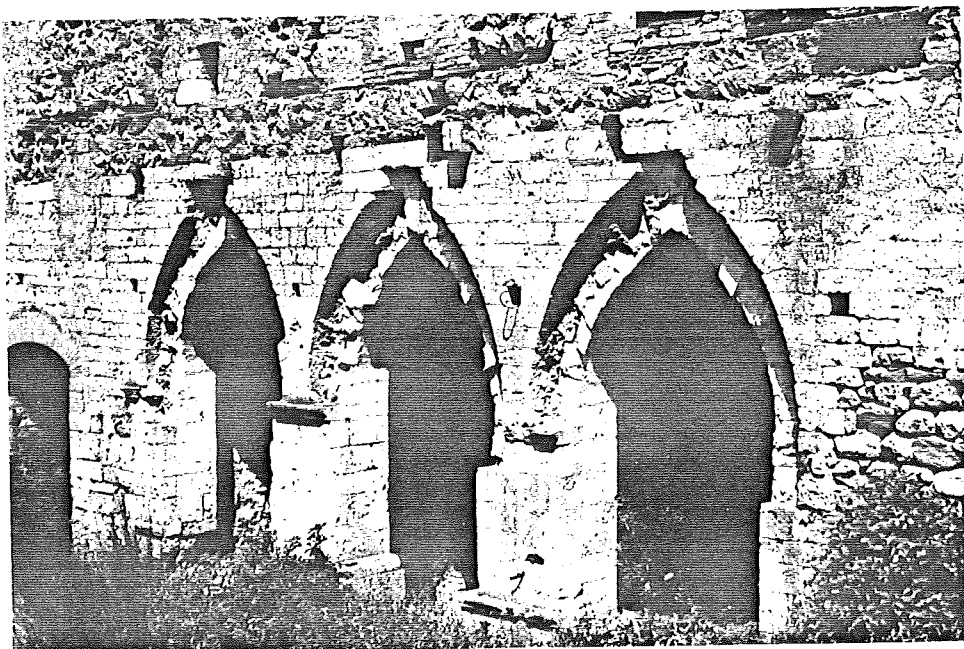


Photo 2. Gothic arcade (lacking voussoirs and keystones) of west facade of casa colonica (Appendix C, BUILDING PLAN, No. 8).

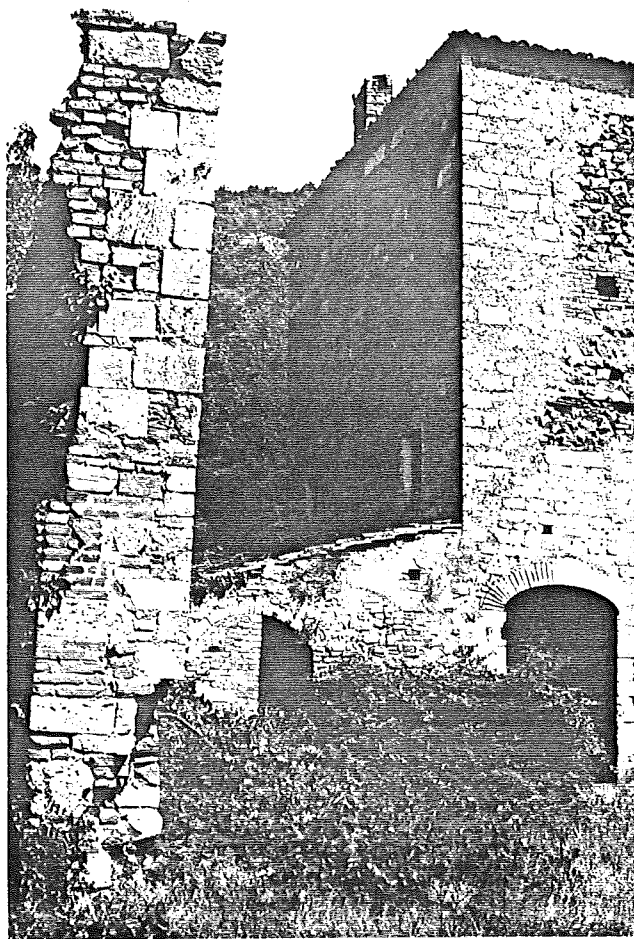


Photo 3. North facade of casa colonica plus attached shed roof structure and south corner remnant of adjoining, unidentified building to the northwest (Appendix C, BUILDING PLAN, Nos. 21 and 15, respectively).

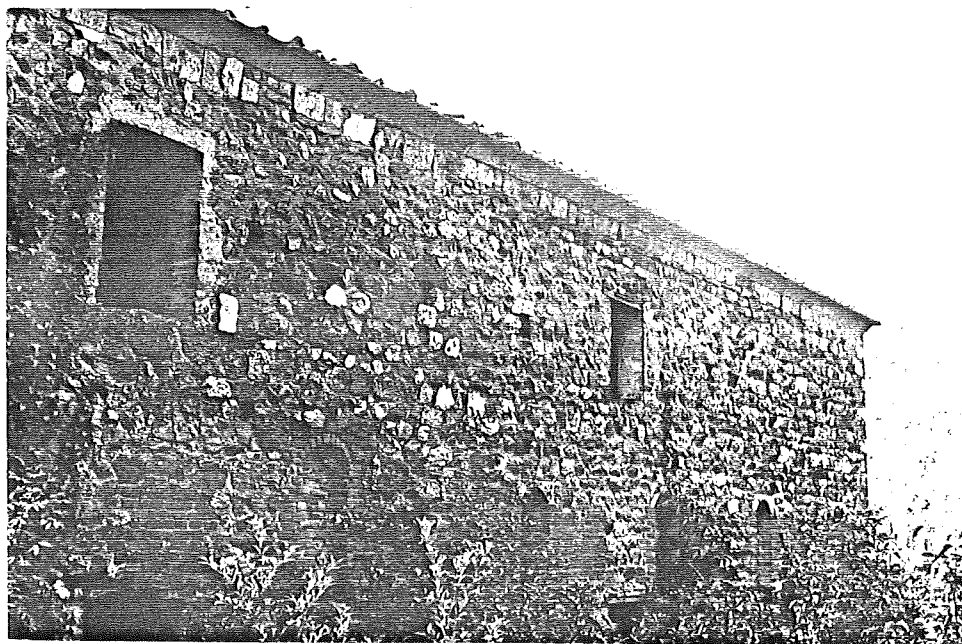


Photo 4. East facade of casa colonica, northern end (Appendix C, BUILDING PLAN 9).

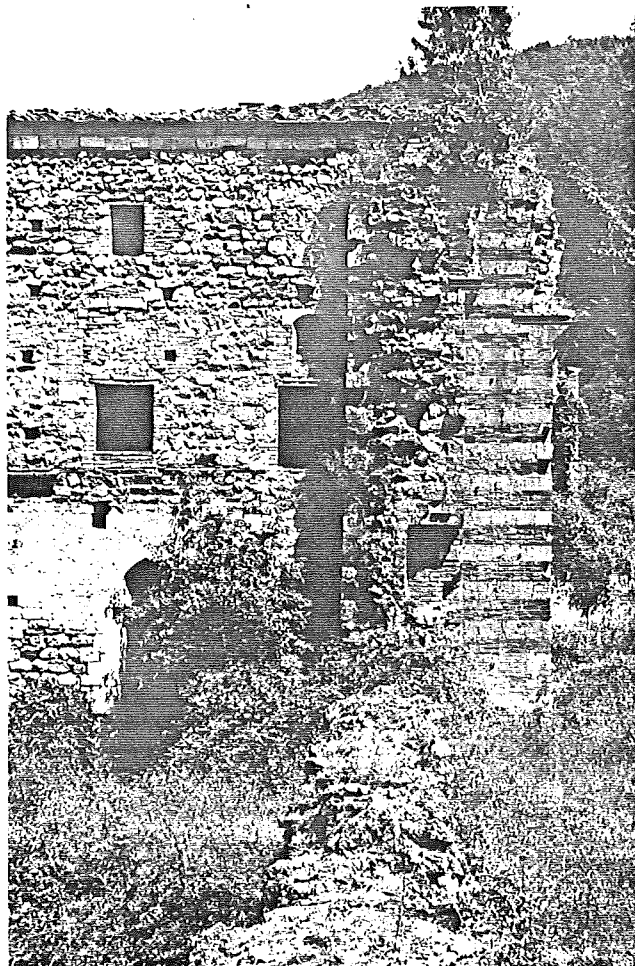


Photo 5. Ruins of north nave wall and north apse wall of the third church of Santa Lucia showing its integration to the southwest corner of the casa colonica (Appendix C, BUILDING PLAN, No. 10).

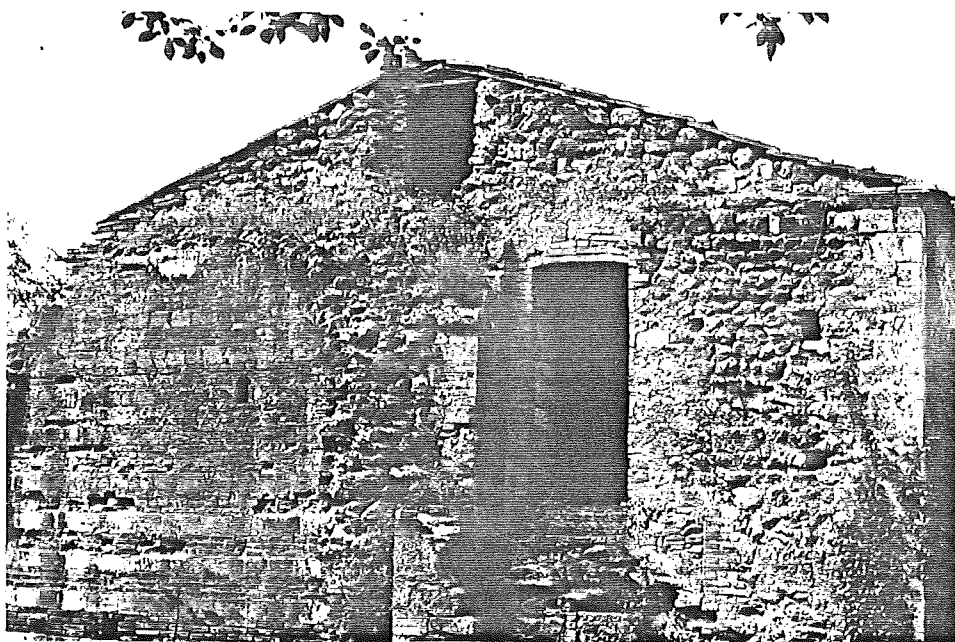


Photo 6. South facade of casa colonica showing gable roof, second floor entrance, location of a former staircase, and remains of the north apse wall of the third church of Santa Lucia (Appendix C, BUILDING PLAN, No. 11).

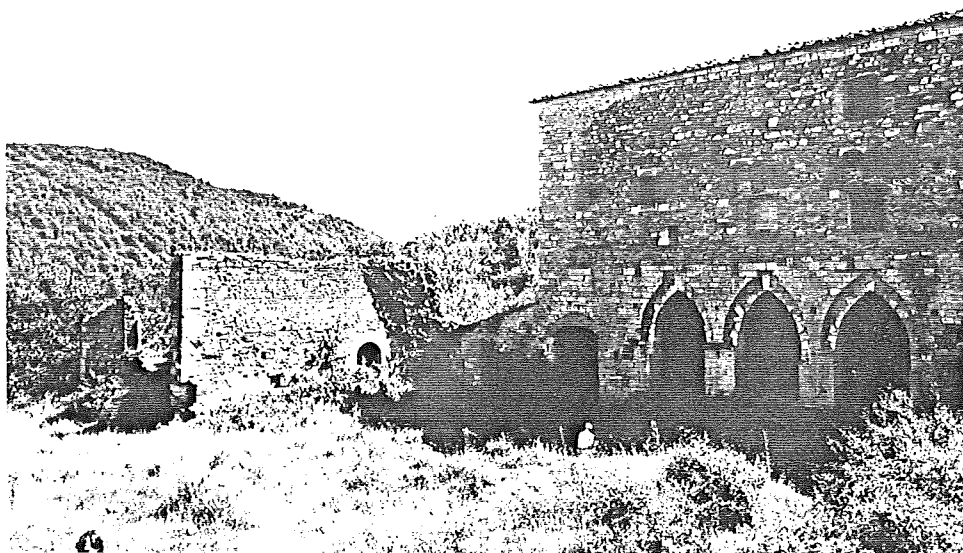


Photo 7. West facade of casa colonica and unidentified, fragmentary building attached at the northwest corner (Appendix C, BUILDING PLAN, No. 15).

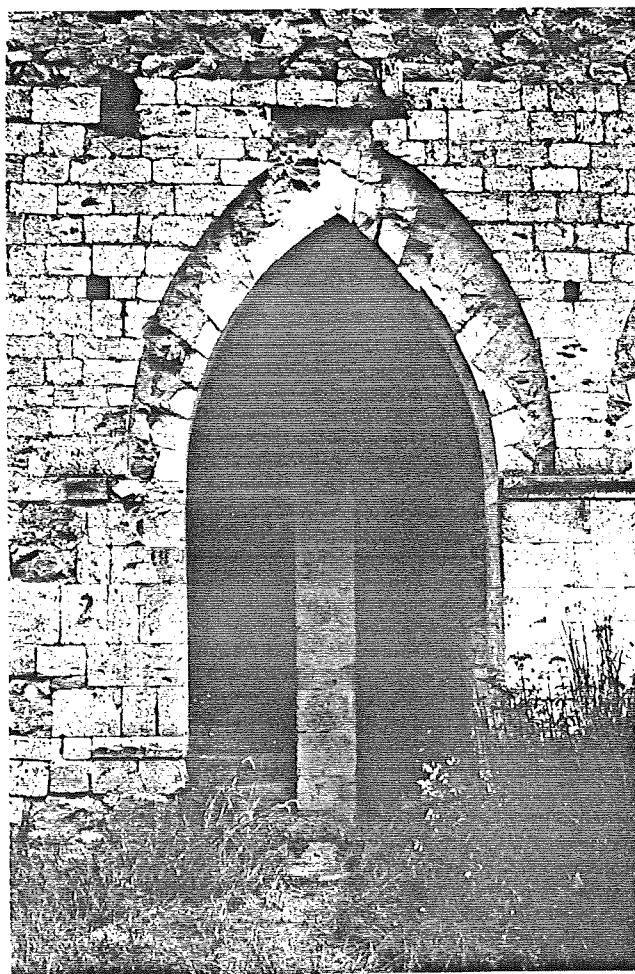


Photo 8. Northern arch of arcade of west facade of casa colonica that leads to staircase to upper floors (Appendix C, BUILDING PLAN, No. 12).

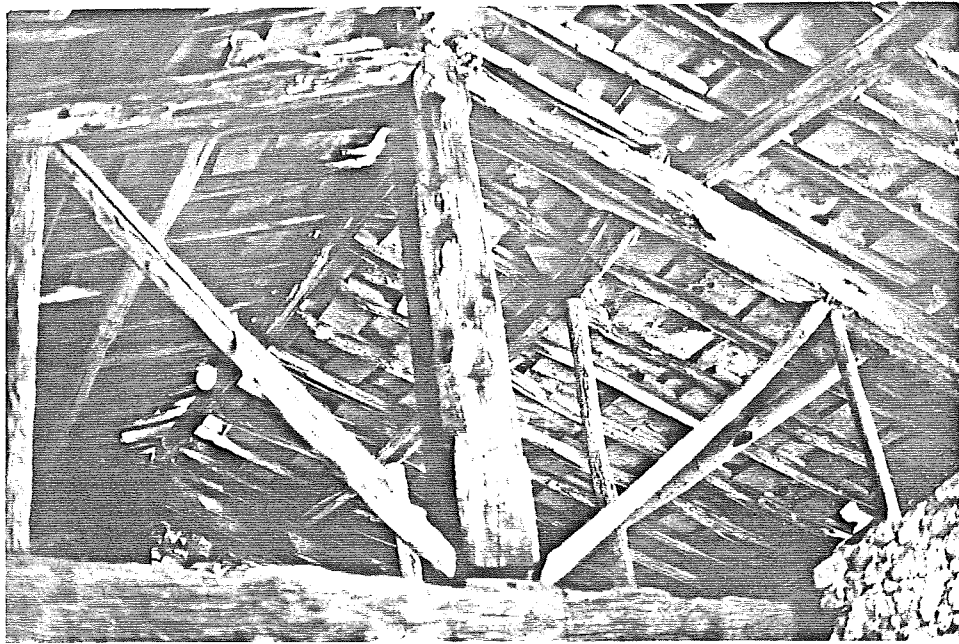


Photo 11. A-frame, mortice and tenon trussed roofing structure of south gable end (Appendix C, BUILDING PLAN, No. 13). View from second floor, southeastern room, showing west side of north-south dividing wall and holes in roof (Appendix C, BUILDING PLAN, No. 19, roof, east side).

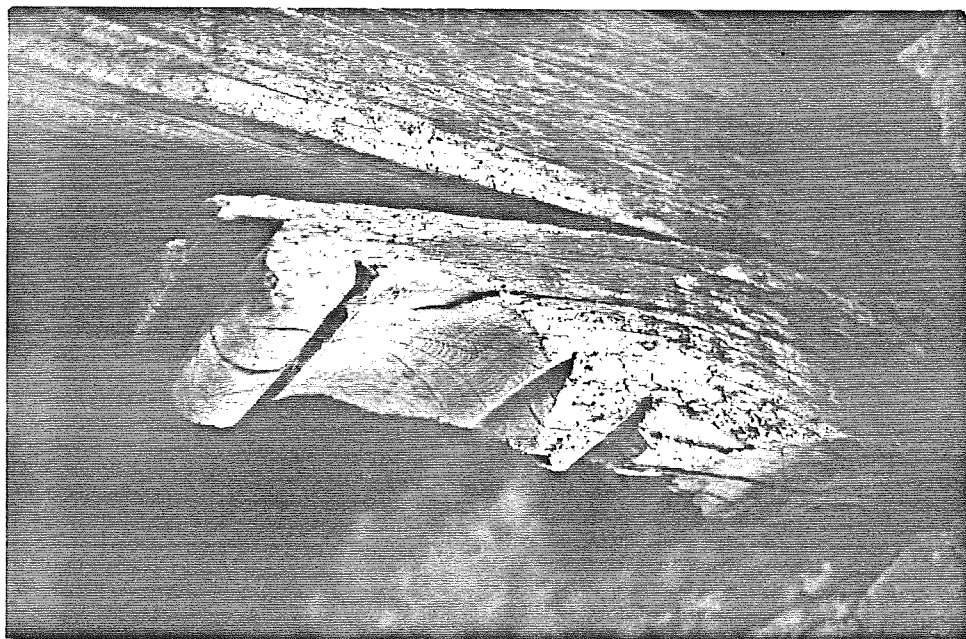


Photo 12. Carved wooden corbel imbedded in east wall to support roof timber of truss construction (Appendix C, BUILDING PLAN, No. 14).

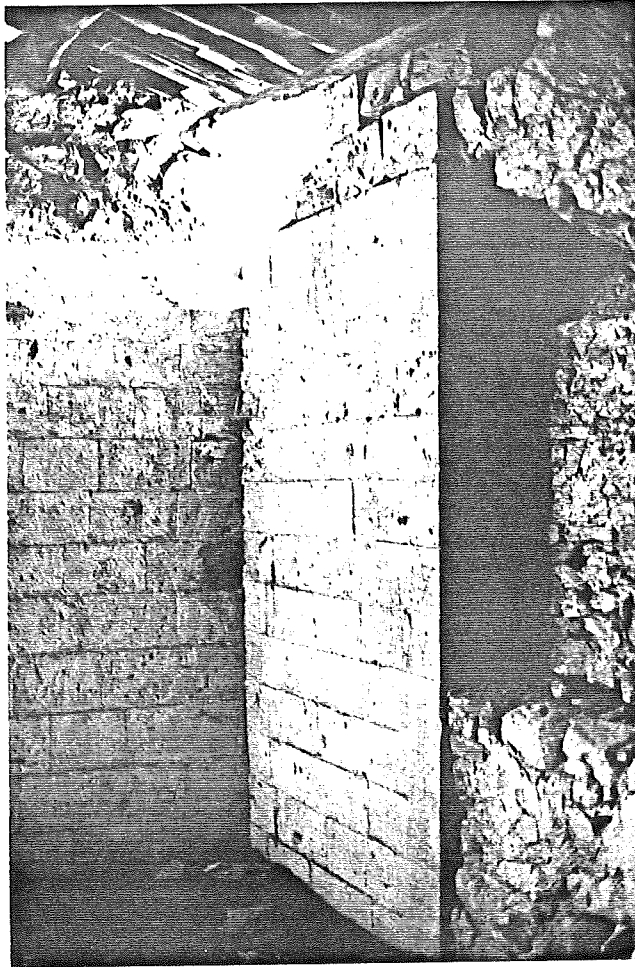


Photo 9.

Ashlar walls (possible remnants of sacristy of second church of Santa Lucia) of second floor, southeast corner of casa colonica plus abutted rubble wall and window infill of west facade (Appendix C, BUILDING PLAN, No. 22); note hole in roof and cornice (Appendix C, BUILDING PLAN, No. 19, roof, southeast corner).

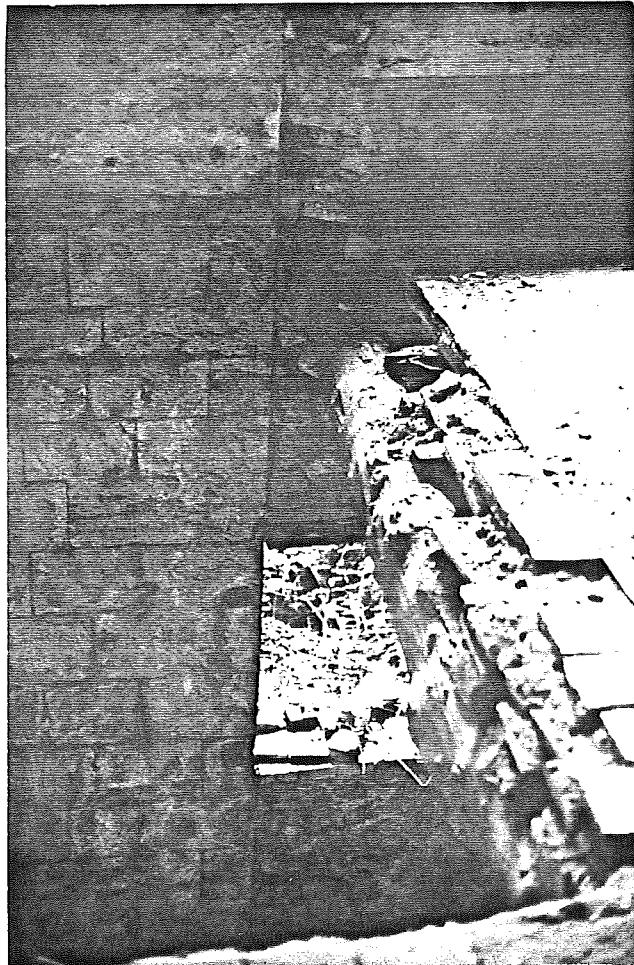


Photo 10.

Ashlar walls of southeast corner of casa colonica and abutted west facade at first and ground floor levels (Appendix C, BUILDING PLAN, No. 23). Hole in first floor level shows two layers of paving tile with top layer laid in herringbone pattern (Appendix C, BUILDING PLAN, first floor, No. 6).

CHRONOLOGY AND HISTORY OF SANTA LUCIA

DATE	EXTANT HISTORICAL DOCUMENTATION	CONSTRUCTION/DESTRUCTION OF BUILDINGS FROM ARCHAEOLOGY	SOURCE
ca. 950		Church of <u>SANTA LUCIA I</u> may have been constructed	Radan & Lengyel 1974a, 10 Radan w. Lengyel 1974b, 244
ca. 1010 or later		<u>SANTA LUCIA I</u> probably destroyed by fire	
		<u>Evidence from:</u>	
		. coin of Henry II (b. 972, King of Germany 1002, Emperor 1014) found under second terrazzo floor of Santa Lucia II	Radan & Lengyel 1974a, 10 Radan w. Lengyel 1974b, 243-44
		. coin of Guido Tarlato, Archbishop of Arezzo found in same stratum	Ibid.
		. fragments of grayware pitcher type datable from 7-11th centuries	Ibid.
		. rubble mixed with charred remains of wood and skeletons	Radan & Lengyel 1974a, 11-12
		<u>Remains of church:</u>	
		. ashlar foundation fragments and stones dividing nave into east and west sections	Radan & Lengyel 1974a, 10-11
		. ossuary bound to foundation with bones dating earlier than 1000	Radan w. Lengyel 1974b, 246
		. Rubble mixed with charred remains of wood	Radan & Lengyel 1974b, 11
Between ca. 1010 and 1200		<u>SANTA LUCIA II</u> constructed probably soon after destruction of Lucia I due to findings of bones in mortar of second church	Radan & Lengyel 1974a, 12 Radan w. Lengyel 1974b, 244
		<u>Construction: (church &amp; cloister)</u>	
		. squared apse	Radan & Lengyel 1974a, 12-17 Ibid., 12
		. sacristy	Ibid., 12
		. concrete floor	Ibid., 12
		. porch or atrium with baptismal font	Ibid., 14, 17
		. cloister with walk, water channel system (also used in S. Lucia I) and wooden canopy with roof tiles	
		. small brick vaulted subterranean room under cloister walk	Ibid., 14
		<u>Remains (above ground):</u>	
		. "consoles" on monastery building facade	Ibid., 17
		. possibly the southwest ashlar corner of the present casa colonica was a portion of the sacristy	hypothesis based on Ibid., 12

DATE	EXTANT HISTORICAL DOCUMENTATION	CONSTRUCTION/DESTRUCTION OF BUILDINGS FROM ARCHAEOLOGY	SOURCE
27 August 1201	Santa Lucia first mentioned as Augustinian hermitage from a contract of this date		Radan w. Lengyel 1974b, 245 n. 61
20 January 1225	Land transfer to Fr. Palmerio, Prior of Santa Lucia for the Romitorio di Rosia		Repetti 1835, Vol. II, 74
16 December 1225	Land transfer to Fr. Palmerio, Prior of the Augustinians of the Hermitage of Santa Lucia of Rosia		Repetti 1835, Vol. II, 74
23 December 1234	Land transfer from the Hermits to Priest Andrea, Canon of the Pieve di Rosia		Repetti 1835, Vol. II, 74
1244	Eremetical houses of Tuscany united under the Rule of St. Augustine: "fratres heremitae de Tuscia ordinis sancti Augustini"		Radan w. Lengyel 1974b, 238
1256	"Great Union" of orders, of which Hermit Friars of St. Augustine were one of four		Radan w. Lengyel 1974b, 238
1256-1267		<p>PROBABLE DESTRUCTION OF SANTA LUCIA II &amp; CONSTRUCTION OF SANTA LUCIA III BETWEEN 1257 &amp; 1267</p> <p>As of this writing, no explicit documentary information or specific evidence from archaeological findings enables precise dating of either the destruction of SANTA LUCIA II or of the building of SANTA LUCIA III, despite implications made by Radan and Lengyel in their two articles. In Radan &amp; Lengyel 1974a, on page 6, they say their six archaeological campaigns show "three sequential campaigns of construction . . . the church rose from humble beginnings, was destroyed by fire, was rebuilt in its final form, only to be destroyed by yet another fire." Later, they say it is impossible "to ascertain the time which elapsed between the construction of SANTA LUCIA II and the rebuilding of the church in its last form, the ruins of which are still visible today." It is reasonably sure that little if any building or enhancing of the buildings was done after 1256;<sup>29</sup> the church and building complex reached its present and final form prior to that date."</p>	Radan & Lengyel 1974a, 6
			Radan & Lengyel 1974a, 17
			Radan & Lengyel 1974a, 17-18

DATE	EXTANT HISTORICAL DOCUMENTATION	CONSTRUCTION/DESTRUCTION OF BUILDINGS FROM ARCHAEOLOGY	SOURCE
		<p>However, in another article (Radan w. Lengyel 1974b) their comments differ, indicating construction of Santa Lucia II took place between 1257 and 1267. They say " . . . the hermitage still had before it certain disasters such as the one which occurred a year after the Great Union, <sup>87</sup> [1256] possibly as a result of a combination of accidents and partial landslides. Evidence of the destruction can still be seen near the south wall and in the huge stone found embedded in the central part of the church. With physical space reduced, some hermits moved out of St. Lucia and founded a new monastery, S. Agatha's which existed until 1610. <sup>88</sup>" A subsequent paragraph paraphrases translations of the historical documentation cited below from 1266-1267 with freedom and concludes that the church was rebuilt by 1267. Later destruction they attribute to the condottiere Hawkwood from 1380-90.</p> <p>These conflicting comments in the two articles are compounded by what appears to be incomplete or inaccurate citations. Footnote 87 cites Repetti, Vol. III, p. 74, which has no references to Santa Lucia; the correct volume should be Vol. II, but this page lists no mention of disasters. A second citation is to Merlotti, <u>Relazione Storica</u>, passim. This has not been checked, and should be. Footnote 88, referring to founding of S. Agatha's again cites Repetti, Vol. III, p. 74, but there is no information regarding S. Agatha's on this page nor in Vol. II, p. 74 (copy attached).</p> <p>A final comment on destruction of the buildings states "a large section of the cloister was destroyed in the 15th century and never rebuilt." No documentation is provided.</p>	Radan w. Lengyel 1974b, 248-49
			Radan w. Lengyel 1974b, 249
			Radan w. Lengyel 1974b, 249, 255 FN 90
			Radan w. Lengyel 1974b, 254 FN 87
			Radan w. Lengyel 1974b, 254 FN 88
			Radan w. Lengyel 1974b, 249
		<p><u>SANTA LUCIA III and Extant Building Complex</u></p> <p><u>Church Construction</u></p> <ul style="list-style-type: none"> <li>. aisleless church with square apse and domical, ribbed four-part vault (26.70 m. long x 10.75 m. wide)</li> <li>. timber roof, mortice and tenon joint A frame structure</li> <li>. exterior zebra pattern of white limestone and red brick</li> </ul> <p><u>Remains:</u></p> <ul style="list-style-type: none"> <li>. foundation walls</li> <li>. full height of north wall of apse attached to the casa colonica</li> </ul>	Radan & Lengyel 1974a, 17-25; see especially p. 24 and the entire article for more details and reconstruction plans

Cloister

Nothing above ground remains. The notched stone "consoles" for a roof support that protrude from the west facade of the present casa colonica may have been the same ones used for the roof over the walkway of the cloister of SANTA LUCIA II. If they are not, the archaeologists references to a cloister with walkway and roof should pertain to SANTA LUCIA III, not SANTA LUCIA II.

Radan & Lengyel 1974a,  
14-17

Monastery Building (Casa Colonica)

The present building appears to have been added to the northeast apse end of SANTA LUCIA III at an unspecified date, but clearly after the construction of the church. The southwest corner of the casa colonica is a fine, ashlar construction more refined than other portions of the building. It extends to the roof, for half the depth of the south facade, and about a meter and a half along the west facade. It may have been a remaining portion of the former sacristy of SANTA LUCIA II, to which SANTA LUCIA III was integrated. The present, much altered west facade of the casa colonica abutts this ashlar section, impling a later addition; the south facade is extended eastward with rubble stone.

See further details describing the building in its present state as a deserted casa colonica in the main text.

HYPOTHESIS REGARDING DESTRUCTION:

The various implications from Radan and Lengyel's articles seem to indicate that SANTA LUCIA II was extant and functioning in 1256 when the "Great Union" took place, but that a disaster befell the church sometime before 1266 when indulgence decrees were issued, encouraging people to support what would have been the building of SANTA LUCIA III. Further research should be carried out to verify the exact date of the demise of Santa Lucia II and the reasons for and the dates of the successive destructions of Santa Lucia III. At the moment the authors have only provided inferences and the available historical documentation is too scant to allow for more than conjecture or hypothesis.

Repetti 1835,  
Vol. II, 74

Ibid.

Ibid.

27 November 1266	Pope Clement IV gave indulgences for those who visited the Church of Santa Lucia	
17 May 1267 Ischi	Bishop of Grossetto granted indulgences for 40 days to Ermo di Santa Lucia di Rosfa, diocese of Volterra	
20 May 1267 Marsigliana	Similar decree from Bishop Ruggieri of Massa Marittima	

DATE	EXTANT HISTORICAL DOCUMENTATION	CONSTRUCTION/DESTRUCTION OF BUILDINGS FROM ARCHAEOLOGY	SOURCE
3 February 1271	Land transfer from Spannocchia family to Fr. Bonajuto, prior of the hermitage.		Ibid.
3 April 1278	Land transfer from the Spannocchias to Fr. Filippo of the Union of Hermits of Rosia		Ibid.
1274-1280 1295-1298 1298-1301 1301-1304	"SS. Lucia et Antonii de Rosia" is listed as a contributor of tithes to the congregation of the Tuscan Hermit Friars of the Order of St. Augustine for these years.		Radan w. Lengyel 1974b, 252 n. 41
1380-1390	Some destruction may have occurred to Santa Lucia III by the condottiere John Hawkwood		Radan & Lengyel 1974a, 33 n. 48. See also Muratori <u>Scriptores</u> , 15, 187-89.
1539-51	In use by the Augustinians when Girolamo Seripando was Prior General of the Order.		Ibid. See also Arbesmann, <u>Analecta Augustiniana</u> 29 [1966], 24, n. 53.
1620-1700	Lopez Bardon Thyrsus' <u>Monastici Augustiniani . . . ab anno 1620 usque ad 1700 lists</u> Santa Lucia in Rosia as an existing monastery in "Provincia Rosia."		Lengyel 1969, 47.
1661	Bollandists visited Santa Lucia and saw a deteriorating fresco of the Blessed Augustine Novello in the church and found one priest and one lay brother on the site. (From Arbesmann, <u>Analecta Augustiniana</u> , XXIV, p. 49, n. 123; should be verified) Radan and Lengyel note (n. 96, p. 255) that in 1650 Pope Innocent had ordered religious houses closed if they had less than six members.		Radan w. Lengyel 1974b, 249, 255 n. 96
1785	Church complex was abandoned as a religious site due to repression of Joseph II		Radan & Lengyel 1974a 33 n. 48 Radan w. Lengyel 1974b, 249

DATE	EXTANT HISTORICAL DOCUMENTATION	CONSTRUCTION/DESTRUCTION OF BUILDINGS FROM ARCHAEOLOGY	SOURCE
Between 1785 & 1835		CONVERSION TO CASA COLONICA with ongoing changes through 1940's	
1835	Reference to the building as a "Casa Colonica."		Repetti 1835, Vol. II, 74
Between 1835 and 1940's	Use as a casa colonica and as a field kitchen during World War I.		Count F. Cinelli
1940's-1968	Unused		Ibid.
1969-1974	Site of archaeological excavations		Ibid.
1987 (summer)	Building survey site for University of Pennsylvania's Graduate Program in Historic Preservation		

**DIZIONARIO  
GEOGRAFICO FISICO STORICO  
DELLA TOSCANA**

CONTENENTE LA DESCRIZIONE

**DI TUTTI I LUOGHI DEL GRANDUCATO**

**DUCATO DI LUCCA**

**GARFAGNANA E LUNIGIANA**

COMPILATO

**Da Emanuele Repetti**

SOCIO ORDINARIO

**DELL'I. R. ACCADEMIA DEI GEORGOFILI**

E DI VARIE ALTRE.

---

**VOLUME SECONDO**



**FIRENZE**  
**PRESSO L'AUTORE E EDITORE**

COI TIPI DI A. TOFANI

**1855**

e qualche pianta di vite, il di cui sugo convertesi costà in una vera ambrosia.

EREMO di MONTENERO. — *Ved.* MONTENERO di LIVORNO.

EREMO di MONTESENARIO. — *Ved.* MONTESENARIO, e ASINARIO (MONTE).

EREMO di MONTICIANO. — *Ved.* MONTICIANO in Val-di-Merse.

EREMO NUOVO di STRABATENZA d'ell' ALPE di CORTINE nella Valle del Bidente in Romagna. — *Ved.* CONIULO (S. PIETRO al).

EREMO o ROMITORIO di ROSIA in Val-di-Merse. Antico convento di Agostiniani Romiti con vasta chiesa (S. Lucia) sulla ripa destra del torr. Rosia, nella Com. Giur. e 9 migl. a grecale di Chiusdino, Dioc. di Volterra, Comp. di Siena.

Questo antico convento dei Romiti Agostiniani, ora ridotto ad uso di casa colonica della tenuta Spannocchia, cui resta a contatto il tempio de' SS. Antonio e Lucia, trovansi nella tortuosa gola del torr. Rosia, nella traversa della Montagnuola, fra Mont'Arienti e il ponte di Rosia.

Il Romitorio di Rosia, al pari dei documenti superstiti ad esso relativi, rimonta al secolo XIII. — Esso dovè molto alla generosità della nobil famiglia senese de' Spannocchi, stata costantemente signora di quella vasta tenuta.

Imperocchè, con istrumento del dì 16 dic. 1225 rogato in Mont'Arienti, Gherardino de' Spannocchi permise con fr. Palmerio priore degli Agostiniani dell'Eremo di S. Lucia di Rosia un pezzo di bosco in luogo detto al colle, ricevendo in cambio altro pezzo di terra nella corte di Saja. Con istrumento poi del 20 genn. dello stesso anno 1225, ab incarnatione, il prete Gherardo di Uguccione, rettore della chiesa parr. di S. Maria a Montarienti, vendè a fr. Palmerio priore di S. Lucia di Rosia, che riceveva per i suoi Romiti, una porzione di bosco situato in luogo detto *Petraja* presso il romitorio di Rosia. — Dal quale vocabolo di *Petraja* sembra potersi dedurre, che sino d'allora fossero aperte costà delle cave di marmo simile a quello di Montarienti, come infatti vi si trova. — Con altro rogito del 23 dic. 1234 gli Eremiti suddetti donarono a prete Andrea canonico della pieve di Rosia per la sua chiesa la porzione del suolo che loro apparteneva al di quà del Vado di Fargeto, e dalla parte opposta tanto locale da costruirvi un mulino.

Con breve dato in Ischia, li 17 maggio 1267 Azzo vesco, di Grosseto concedeva indulgenza di 40 giorni ai suoi diocesani purchè avessero soccorso con elemosine la chiesa dell'Eremo di S. Lucia di Rosia della diocesi Volterrana; e tre giorni dopo un simil breve fu dato in Marsiliana da Ruggieri vescovo di Massa marittima.

Alla qual'epoca la stessa chiesa esser doveva presso al suo compimento, stantechè il pont. Clemente IV, con breve del 27 nov. 1266, compartiva indulgenze a chi avesse visitato la chiesa dell'Eremo di S. Lucia di Rosia nell'ottava della sua dedica.

Nel 3 febr. 1271, Zaccaria del fu Buonaccorso da Spannocchia, per rimedio dell'anima di suo padre e di donna Altigrada, sua madre, donò a fr. Bonajuto priore dell'Eremo anzidetto un pezzo di terra in luogo denominato *Acquavivola*; e con altro istrumento del 3 aprile 1278, fatto presso lo stesso Eremo, Accorsino e Viviano del fu maestro Grazia degli Spannocchi, vendarono ai frati di S. Lucia di Val-di-Rosia un pezzo di terra in l. d. Corte. — Finalmente nel 19 maggio 1286 Pietro del fu Palmerio de' Spannocchi alienò a fr. Filippo sindaco dell'Eremo di Rosia tre quarte parti pro indiviso d'un pezzo di terra boschiva posto in *Acquavivola*. (Arch. Dipl. Fior. Carte di S. Agostino di Siena.)

EREMO di RUPE-CAVA nel Monte Pisano. Antico romitorio dedicato a S. Maria, nella parr. di S. Pietro a Cerasomma, piv. di Montuolo, già del *Flesso*, Com. Giur. Dioc. e Duc. di Lucca, la quale città trov. si 4 migl. circa a greco di *Rupe-Cava*.

Veggonsi le sue vestigio in una cavità del Monte Pisano alle spalle del cast. di Ripafratta, fra la dogana di tal nome e quella di Cerasomma.

All'eremo stesso fu aggregata la preesistente *Cella del Prete Rustico*, di cui si è fatta menzione al suo luogo.

Fu esso fondato nel principio del secolo XIII nei beni dei nobili di Ripafratta, che ne conservarono sempre il giurisdizione per aver essi donato una porzione di quel monte agli eremiti di Rupe Cava, la di cui chiesa (S. Maria) fu consagrada nel 1214 da Roberto vescovo di Lucca. Qui romiti dovettero abbracciare la regola Agostiniana per bolla pontificia del 1285.

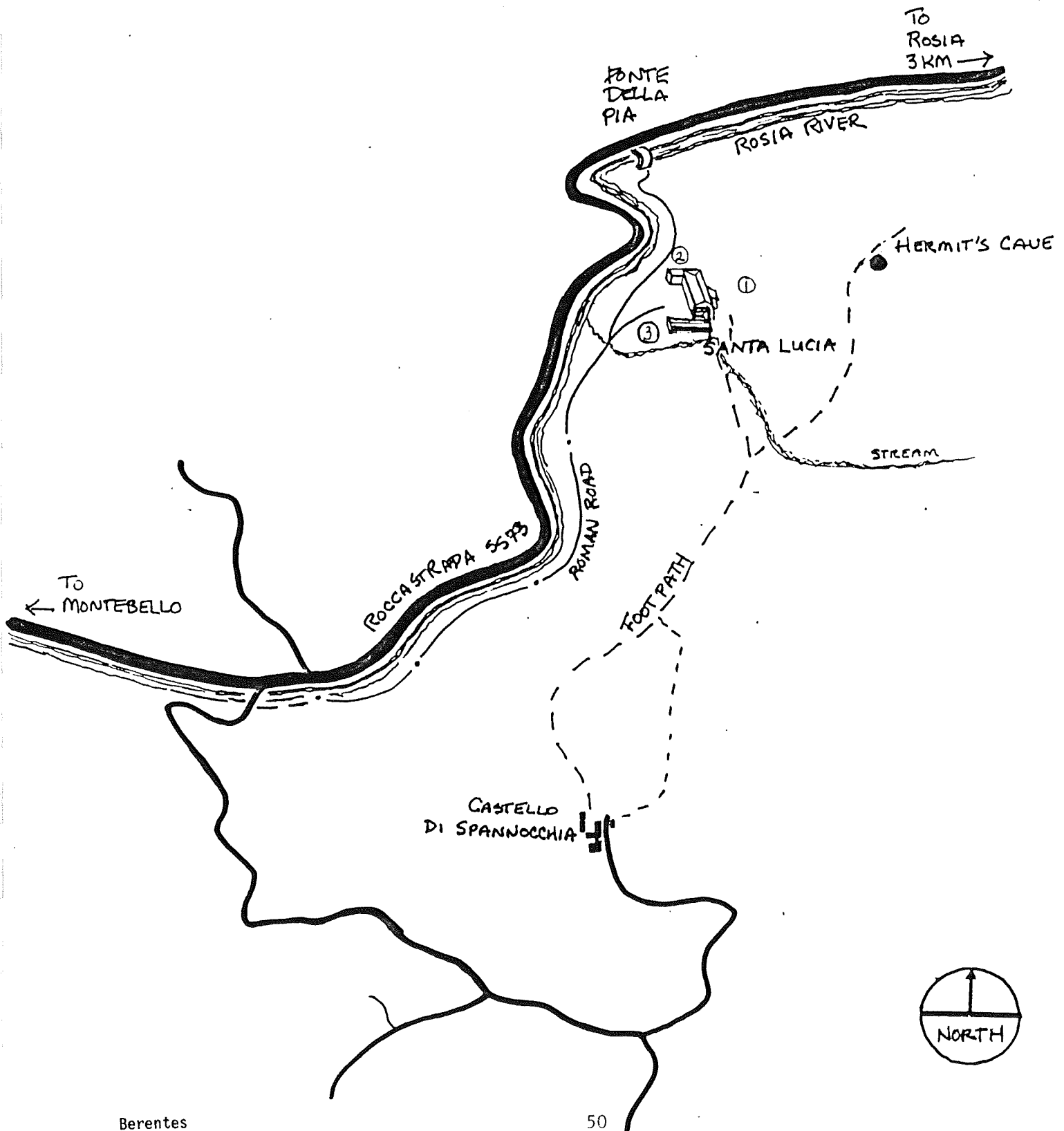
Le ultime memorie dell'Eremo di Rupe-Cava arrivano all'anno 1368.

17. may  
1267

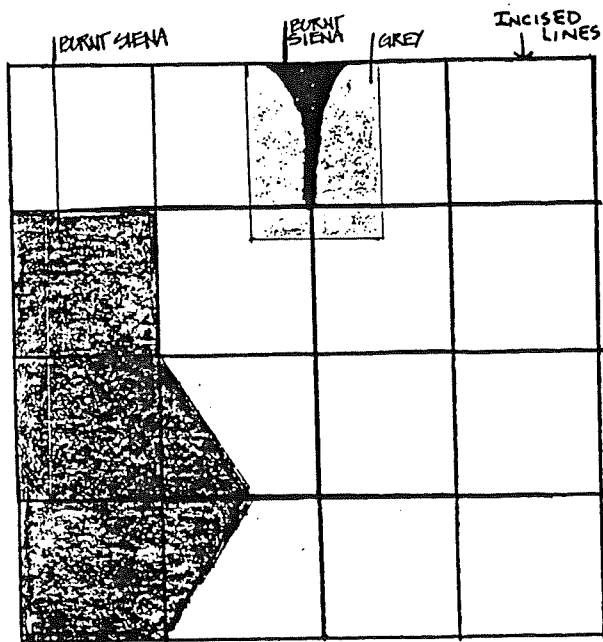
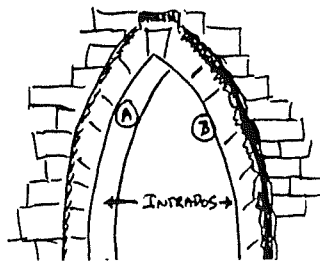
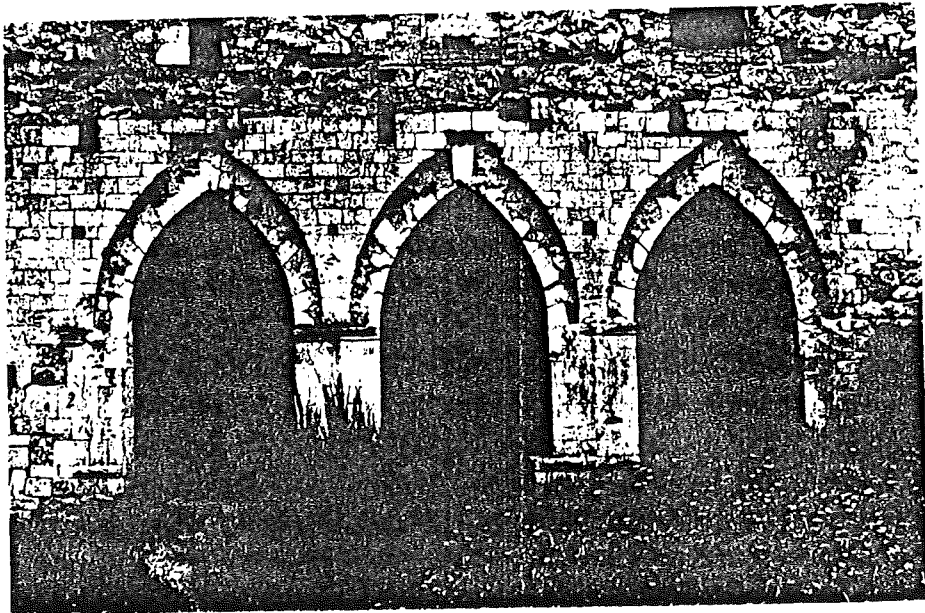
27 Nov.  
1266

EREMO  
ANTONIO (S.  
EREMO  
VAL in Val-  
EREMO  
MIATA in  
Camaldole  
torr., nell  
Com. e 7  
d'Orcia, G  
Montalcino  
La sua in  
secolo XI,  
nell'anno  
sto locale  
tempo lo  
maldoles  
Fu pure  
Federigo  
Arrigo I,  
seguito, p  
del 13 ge  
gregato all  
posta sulle  
i Benedett  
forma deg  
Dante di  
Verso i  
scuoli, i Sa  
Orcia fec  
Eremo del  
a ruba. L  
fugiarsi e  
Congrega  
incorpora  
Vivo e de  
nel 1438  
nese, e dal  
supia vend  
poi papa  
nipoti e c  
servano g  
contea. —  
ERME  
romitorio  
monaci Ci  
Esso è situ  
e la cima d  
S. SALVAT  
FRANZ.  
cina. Una  
pietere di  
Troiso, C  
Duc. di V  
ERMET

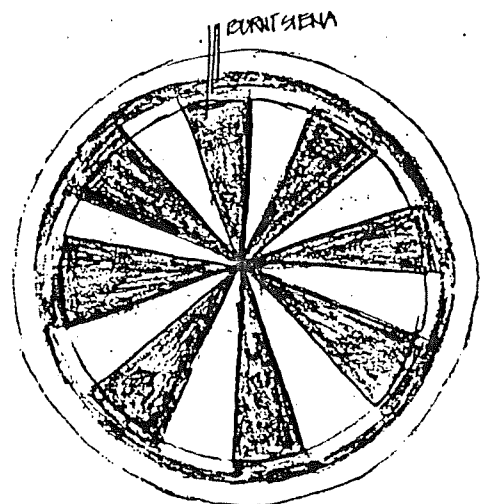
SITE MAP SHOWING NORTHWEST CORNER OF SPANNOCCHIA ESTATE WITH LOCATION OF CASTELLO DI SPANNOCCHIA, SANTA LUCIA, AND HERMIT'S CAVE







A. PATTERN LOCATED ON INTRADOS - CENTER ARCH



B. INCISED PATTERN ON INTRADOSE  
CENTER ARCH  
WEST ELEVATION

Demountable mechanical strain gauge (DEMEC) base sheetDEMEC N°. : 0390 H.

GAUGE FACTOR: \_\_\_\_\_

OPERATOR(s) : Jean K. WolfSHEET N°. : 1

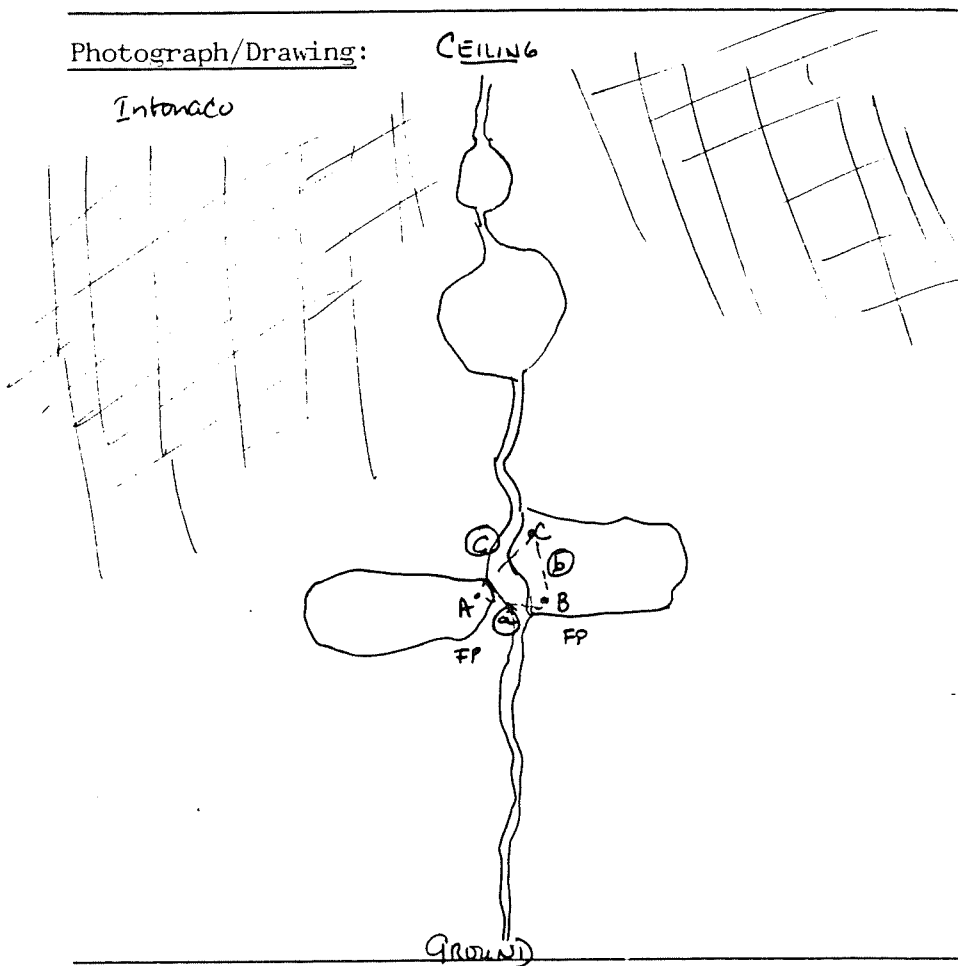
MATERIAL(s) : \_\_\_\_\_

DISC SET N°. : Lucia #1LOCATION : Santa Lucia Monastery Bldg.Ground Floor open LoggiaDESCRIPTION : Crack descends frompresent Ceiling level(ca. 11 m.) to ground level.A large hole exists about  
1/4 way down the crack.Monitoring disks are  
about 50 cm. below hole  
and 2 m. from ground.Wall constructed of large  
undut stones, some rubble  
infill + different mortars.Upper portion of wall  
shows plastering in brownish-  
Sand like intonaco.

Photograph/Drawing:

CEILING

Intonaco



CORRECTED DEMEC BASE READINGS:

DATE : 8/10/87

a : \_\_\_\_\_

TIME : 3:30

b : \_\_\_\_\_

t (°C) : Int: 25.4° Ext: not taken

c : \_\_\_\_\_

RH(%) : Int: 57% Ext: " "

Notes : \_\_\_\_\_

## CORRECTED DEMEC BASE READINGS

ICCROM

DISC SET N°.: Lucia #1

R E A D I N G S		SDR	d1	d2	ratio (r)	INCREMENTS	CORRECTIONS
Dummy 1a	8.49						
a1	6.81						
a2	6.82						
a3	6.83						
a4	6.85						
a5	6.87						
a6	6.85						
Dummy 2a	8.49						

a=

a=

t(°C)= 25.4°

RH(%)= 57%

R E A D I N G S		SDR	d1	d2	ratio (r)	INCREMENTS	CORRECTIONS
Dummy 1b	8.49						
b1	4.26						
b2	4.26						
b3	4.27						
b4	4.30						
b5	4.28						
b6	4.27						
Dummy 2b	8.49						

b=

b=

t(°C)=

RH(%)=

R E A D I N G S		SDR	d1	d2	ratio(r)	INCREMENTS	CORRECTIONS
Dummy 1c	8.49						
c1	11.72						
c2	11.72						
c3	11.72						
c4	11.72						
c5	11.72						
c6	11.72						
Dummy 2c	8.49						

c=

c=

t(°C)= 25.4

RH(%)= 57%



Demountable mechanical strain gauge (DEMEC) base sheet

DEMEC N°. : 03904

GAUGE FACTOR: \_\_\_\_\_

OPERATOR(s) : Joan K. Wolf

SHEET N°. : 1

DISC SET N°. : Lucia # 2

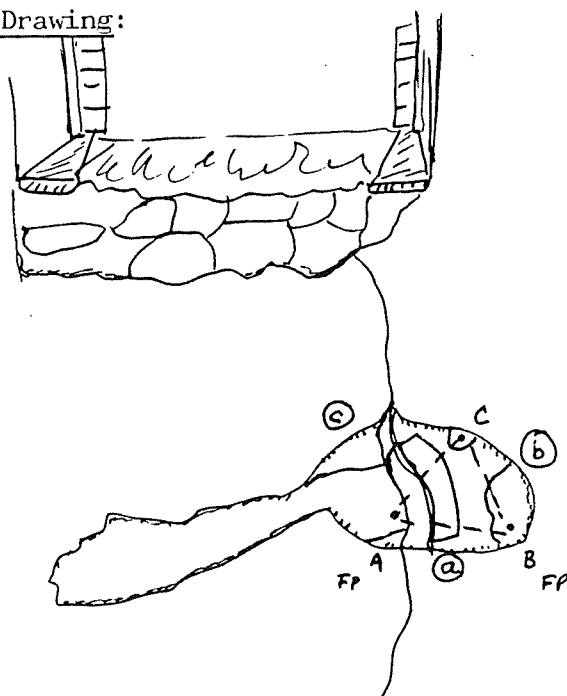
MATERIAL(s) : \_\_\_\_\_

LOCATION : Santa Lucia Monastery Bldg.

Top Floor, NW Room, NE window  
on N wall

DESCRIPTION : \_\_\_\_\_

Photograph/Drawing:



This crack descends  
from sill of NE window  
2/3 of way down to floor.  
Wall appears to be  
constructed of rubble  
brick & stone & covered  
with a thick plaster.  
Discs are located on  
three separate stones.  
Widest portion of crack  
goes along the curved  
brick in the center of  
the A.

Floor

CORRECTED DEMEC BASE READINGS:

DATE : 8/11/87

a : \_\_\_\_\_

TIME : 4:00 PM

b : \_\_\_\_\_

t (°C) : Int: 28° Ext: 31°

c : \_\_\_\_\_

RH(%) : Int: 48% Ext: 47%

Notes : \_\_\_\_\_

## CORRECTED DEMEC BASE READINGS

ICCROM

DISC SET N°.: Ludia # 2

R E A D I N G S		SDR	d1	d2	ratio (r)	INCREMENTS	CORRECTIONS
Dummy 1a	8.49						
a1	7.67						
a2	7.68						
a3	7.68						
a4	7.66						
a5	7.70						
a6	7.65						
Dummy 2a	8.49						

a=

a=

t(°C)= 28°

RH(%)= 48%

R E A D I N G S		SDR	d1	d2	ratio (r)	INCREMENTS	CORRECTIONS
Dummy 1b	8.49						
b1	7.15						
b2	7.15						
b3	7.16						
b4	7.15						
b5	7.15						
b6	7.16						
Dummy 2b	8.48						

b=

b=

t(°C)=

RH(%)=

R E A D I N G S		SDR	d1	d2	ratio(r)	INCREMENTS	CORRECTIONS
Dummy 1c	8.49						
c1	10.31						
c2	10.31						
c3	10.30						
c4	10.30						
c5	10.30						
c6	10.30						
Dummy 2c	8.49						

c=

c=

t(°C)= 28°C

RH(%)= 48%

DEMEC READINGS - DISC SET N°.: LUCIA #2.

SHEET N°.: 2

[illegible]

Demountable mechanical strain gauge (DEMEC) base sheet

DEMEC N°. : 03904

GAUGE FACTOR: \_\_\_\_\_

OPERATOR(s) : J. K. Wolf

SHEET N°. : Lucia # 1

MATERIAL(s) : \_\_\_\_\_

DISC SET N°. : Lucia # 3

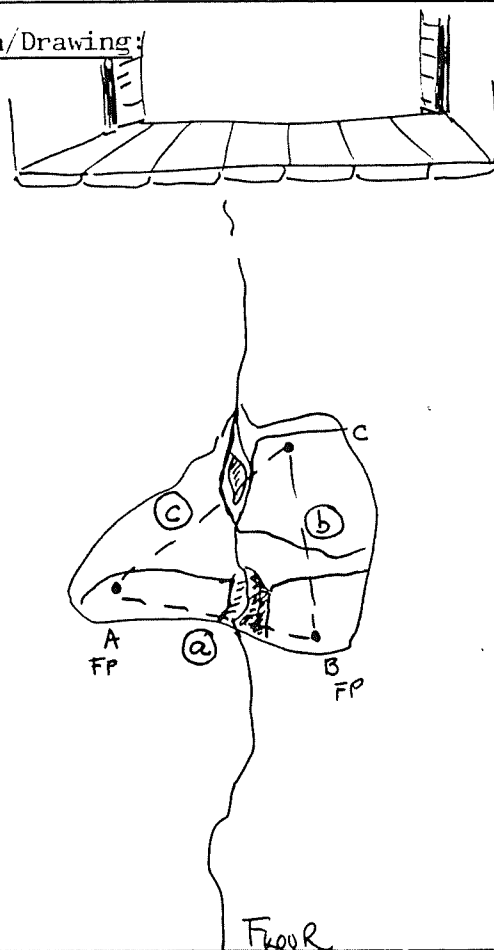
LOCATION : Monastery, Santa Lucia

Top Floor, NW Room NW Window

DESCRIPTION : Crack descends to

floor from sill of  
NW window.

Photograph/Drawing:



points are  
on 3 separate  
stones located  
by cleaning back  
plaster. Considerable  
grouting occurs  
around each, with  
some mortar missing  
in shaded area.

CORRECTED DEMEC BASE READINGS:

DATE : 8/11/87

a : \_\_\_\_\_

TIME : 4:00 PM

b : \_\_\_\_\_

t (°C) : Int: 28° Ext: 31°

c : \_\_\_\_\_

RH(%) : Int: 48% Ext: 47%

Notes : \_\_\_\_\_

CORRECTED DEMEC BASE READINGS

DISC SET N°.: 3**ICCROM**

R E A D I N G S		SDR	d1 d2	ratio (r)	INCREMENTS	CORRECTIONS
Dummy 1a	8.50					
a1	8.49					
a2	8.49					
a3	8.48					
a4	8.50					
a5	8.48					
a6	8.48					
Dummy 2a	8.47					

a=

a=

t(°C)= 28°RH(%)= 48%

R E A D I N G S		SDR	d1 d2	ratio (r)	INCREMENTS	CORRECTIONS
Dummy 1b	8.48					
b1	8.79					
b2	8.80					
b3	8.81					
b4	8.82					
b5	8.82					
b6	8.82					
Dummy 2b	8.49					

b=

b=

t(°C)=

RH(%)=

R E A D I N G S		SDR	d1 d2	ratio(r)	INCREMENTS	CORRECTIONS
Dummy 1c	8.49					
c1	8.56					
c2	8.56					
c3	8.56					
c4	8.56					
c5	8.56					
c6	8.56					
Dummy 2c	8.48					

c=

c=

t(°C)=

RH(%)=

DEMEC READINGS - DISC SET N°. : LUCIA # 3

SHEET N°.: 2

[illegible]

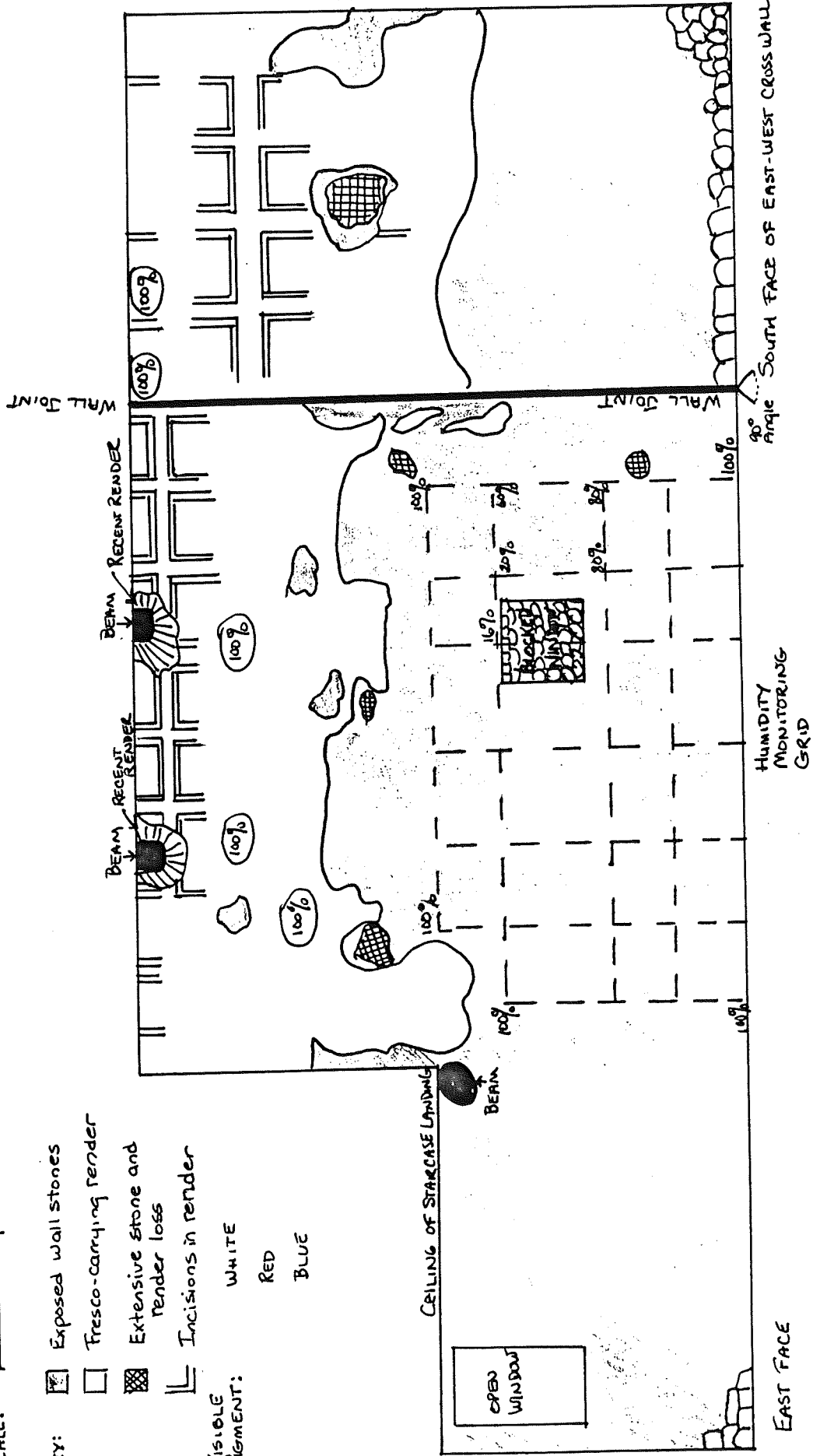
SANTA LUCIA MONASTERY: GROUND FLOOR NORTHEAST ROOM  
SHOWING: FRESCOS ON WALLS  
HUMIDITY GRID

Scale: 1 meter

- Key:
- Exposed wall stones
  - Fresco-carrying render
  - Extensive stone and render loss
  - Incisions in render

Visible pigment:

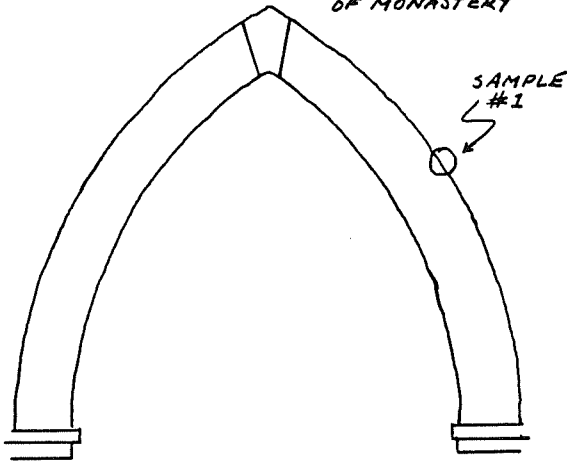
- WHITE
- RED
- BLUE



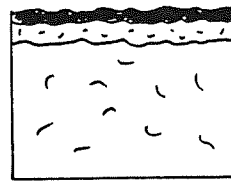
LOCATION OF RENDER/PLASTER SAMPLES

THIN SECTIONS UNDER MICROSCOPE

° SOUTH INTRADOSE OF LEFT-MOST THREE  
POINT GOTHIC ARCH - EXT. WEST FACADE  
OF MONASTERY

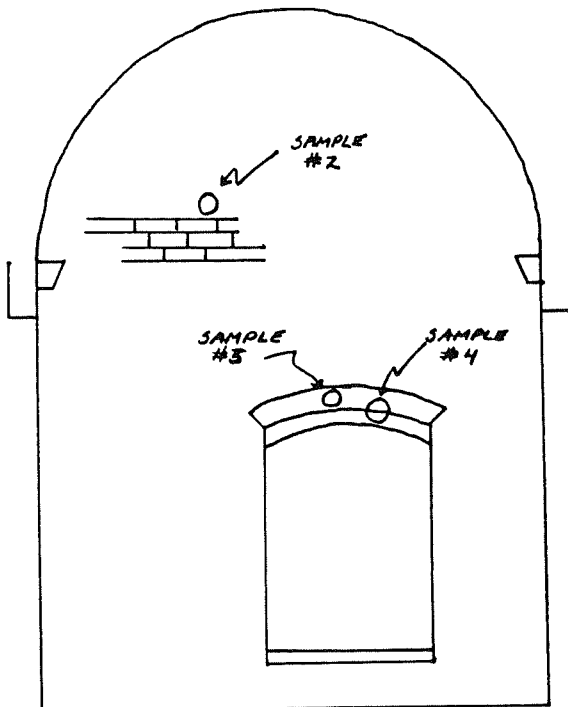


° SAMPLE #1

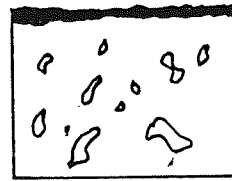


— RED PIGMENT  
— FINE RENDER FINISH  
— ROUGH RENDER BASE

° EXPOSED INT. OF NORTH WEST APSE OF  
CHURCH - PORTION ADJOINING SACRISTY



° SAMPLE #2



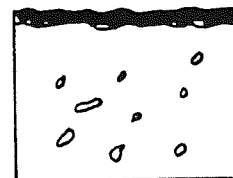
— DIRT LAYER  
— SAND - LIME RENDER

° SAMPLE #3



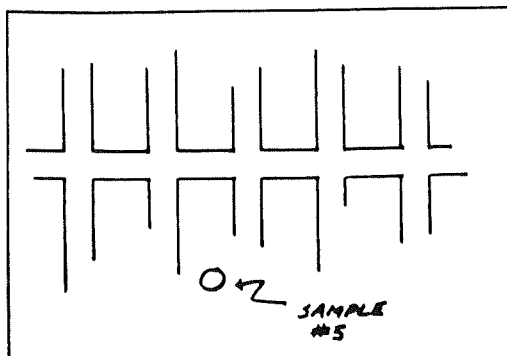
— LIME - MARBLE POWDER  
— LIME - SAND - RENDER

° SAMPLE #4



— LIME - MARBLE POWDER  
— LIME - SAND - RENDER

° INT. SOUTH WALL OF FRESCO ROOM  
IN MONASTERY



° SAMPLE #5



— BLUE PIGMENT  
— RENDER

Appendix H: COURSE SYLLABUS  
Penn at the Castello di Spannocchia

PENN AT THE CASTELLO DI SPANNOCCHIA  
Preservation Practice in Italy  
The Graduate Program in Historic Preservation  
Graduate School of Fine Arts  
University of Pennsylvania  
Co-Sponsored with the Etruscan Foundation  
July 19 - August 30, 1987

## Introduction

A series of unique historical, geographical, social, and political circumstances have given Italy one of the richest cultural patrimonies in the world. Long experience with the preservation of that heritage has led to the development of both a philosophical approach and of technical methodologies that are unequalled elsewhere. The aim of this six-week course, offered by the Graduate Program in Historic Preservation at the University of Pennsylvania under the direction of Dr. David G. De Long, is to introduce graduate students and practitioners to this Italian preservation milieu.

The course faculty represent three major Italian universities - Rome, Venice, and Genoa - as well as the Istituto Centrale del Restauro, and the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM).

The program, though articulated in six weekly segments each addressing a particular area of concern, is unified by two important elements. The first is the course location itself. Through the collaboration of the Etruscan Foundation and Count Ferdinando Ginelli, the course will be conducted at the Castello di Spannocchia, a 16th century villa that is one of the few surviving farming complexes in Tuscany. In addition to providing living and working accommodations which reflect the cultural history of the region, the villa complex will function as a laboratory for practical exercises and a reference point for excursions into the surrounding area.

The second unifying element is the essential methodological approach which infuses all course subject matter. Based on principles developed at ICCROM, the program is conceived as a logical progression from broader issues of theory and planning toward the details of analysis and technical intervention. Thus, the first week of the course deals with the principles of urban and territorial conservation and the general context of the villa. Subsequent weeks focus increasingly on the individual building and then on specific building components. The final week is an attempt to place the detailed information gained in preceding weeks back into the more general context, so as to arrive at some recommendations regarding the future of the entire villa complex.

Obviously, in the scope of a six week program, it is impossible to treat every possible subject matter. In general, emphasis has been placed on issues and techniques not generally addressed in other preservation courses. The aim, however, is not to transfer specific technologies nor to propose ready-made solutions to complex problems. Instead, through an exposure to new ideas and a diverse cultural context, the course should provide an opportunity for meaningful exchange and the development of a consistent conservation philosophy upon which sensitive decisions can be made.

Our success in this endeavor depends on the openness and effort of both course lecturers and participants. It is our hope that Penn at the Castello di Spannocchia will be an enriching experience for all concerned.

US67 Participants

01 BERENTES, Thomas D.	Nantucket, MA	Preservationist
02 BODE, Jacqueline G.	Philadelphia, PA	Civil Engineer
03 CAMPO, Claudia	Bogotá, CO	Architect
04 FAWCETT, John R.	New York, NY	Historian
05 FREEDMAN, Ellen	Philadelphia, PA	Historian
06 HARRIS, Laura L.	Bryn Mawr, PA	Preservationist
07 HAWKINS, Bryan Keven	Philadelphia, PA	Architect
08 JOHANNINGSMEIER, Lisa	Philadelphia, PA	Biologist
09 McBRIDE, Leslie	New York, NY	Architect
10 McCROSKEY, Lauren L.	Eugene, OR	Preservationist
11 McHUGH, Sharon A.	Princeton, NJ	Preservation Planner
12 MYERS, Phyllis	Washington, DC	Preservation Planner
13 SMITH, Maree Lee	Tucson AZ	Art Historian
14 ULLMAN, Leslie L.	Denver, CO	Architect
15 WOLF, Jean K.	Ardmore, PA	Musicologist

UPSE7\_Faculty

Alejandro Alva Balderrama  
ICCRDM  
Via di San Michele 13  
00153 ROMA RM. Italia

Tel.: (06) 580.90.21

Carlo Cesari  
Assessorato all'Urbanistica  
Ufficio Centro Storico Comune di Ferrara  
Piazza Municipale  
44100 FERRARA FE. Italia

Tel.: (0532) 419.366

David G. De Long  
Graduate Program in Historic Preservation  
214 Meyerson Hall  
University of Pennsylvania  
Philadelphia, PA 19104-6311. USA

Tel.: (215) 898.31.69

Giorgio Lombardi  
Cannaregio, Corte Berlendis 6296/A  
30100 VENEZIA VE. Italia

Tel.: (041) 52.32.695

Luciano Pontuale  
Via Pomponio Leto 3  
00193 ROMA RM. Italia

Tel.: (06) 656.78.01

Peter Rockwell  
Viale di Villa Pamphili 20/19  
00152 ROMA RM. Italia

Tel.: (06) 589.27.62

Laura Sbordon-Mora  
Istituto Centrale del Restauro  
Piazza San Francesco di Paola 9  
00184 ROMA RM. Italia

Tel.: (06) 475.11.42

Francesco Scoppola  
ROMA RM. Italia

Tel.: (06) 356.74.94

Jeanne Marie Teutonico  
ICCRDM  
Via di San Michele 13  
00153 ROMA RM. Italia

Tel.: (06) 580.90.21

Giorgio Torraca  
ARCOTECH  
Via Tor Millina 35  
00186 ROMA RM. Italia

Tel.: (06) 687.58.93

## General Schedule

WEEK	DATES	SUBJECT
01	20 JUL-24 JUL	INTRODUCTION. PRESERVATION THEORY, URBAN CONSERVATION
02	27 JUL-31 JUL	DOCUMENTATION, SURVEY, INSPECTION
03	03 AUG-07 AUG	STRUCTURAL MONITORING, INTRODUCTION TO LABORATORY
04	10 AUG-14 AUG	STONE, BRICK, MORTARS, SYNTHETIC PLASTICS
05	17 AUG-21 AUG	PLASTERS, RENDERS, COLOUR
06	24 AUG-28 AUG	URBAN AND TERRITORIAL CONSERVATION. CONCLUSIONS

UFS67. WEEK : 20 JULY - 24 JULY



INTRODUCTION, PRESERVATION THEORY, URBAN CONSERVATION

Lecturers: D.G. De Long (UPENN)  
J. M. Teutonico (ICCROM)  
G. Lombardi (UVEN-ITA)  
F. Scoppola (SUPRONROM-ITA)

In attendance: A. Alva (ICCROM)

Monday, 20 Jul.

08:30-10:00	Inauguration	Introduction to the Course	DSDL, JMT
10:30-13:00	Visit	The Villa and 'Padule'	JMT, DSDL, GL, AA, PART
15:00-16:30	Free		
17:00-18:30	Lecture	Theory of Urban Conservation	GL

Tuesday, 21 Jul.

08:30-10:00	Lecture	Urban Conservation: typological analysis	GL
10:30-13:00	Exercise	The typology of 'Padule', guidelines	GL JMT
15:00-16:30	Free		
17:00-18:30	Lecture	Urban Conservation: Case Studies	GL

Wednesday, 22 Jul.

08:30-10:00	Exercise	'Padule' and other rural houses	JMT PART
10:30-13:00	Exercise	'Padule' and other rural houses	PART JMT
15:00-16:30	Study		PART
17:00-18:30	Lecture	Tuscany: Int. to the Region and History	JMT

Thursday, 23 Jul.

08:30-10:00	Visit	The fortifications of 'Talamone'	FS JMT PART
10:30-13:00	Visit	The fortifications of 'Talamone'	FS JMT PART
15:00-16:30	Visit	The 'Argentario'	FS JMT PART
17:00-18:30	Visit	The 'Argentario'	FS JMT PART

Friday, 24 Jul.

08:30-10:00	Visit	Villa 'Chigi alle Volte Alte'	FS JMT PART
10:30-13:00	Visit	Villa 'Chigi alle Volte Alte'	FS JMT PART
15:00-16:30	Visit	'Siena'	FS JMT PART
17:00-18:30	Visit	'Siena'	FS JMT PART

NOTES:

UP987. WEEK : 27 JULY - 31 JULY

\*\*\*\*\*  
 \* 02 \* DOCUMENTATION, SURVEY, INSPECTION  
 \* \*\*\*\*\*

Lecturers: A. Alva (ICCRDM)  
 L. Sbordoni-Mora (ICR-ICCRDM-ITA)  
 J. M. Teutonico (ICCRDM)  
 F. Scoppola (SUFMONROM-ITA)

Monday, 27 Jul.

08:30-10:00	Lecture	Survey and inspection	AA
10:30-13:00	Exercise	Introduction: inspection of 'Padule'	AA PART
15:00-16:30	Study		PART
17:00-18:30	Lecture	Arch. surfaces: description/functions	LSM

Tuesday, 28 Jul.

08:30-10:00	Lecture	Arch. surfaces: research techniques	LSM
10:30-13:00	Lecture	Arch. surfaces: causes of deterioration	LSM
15:00-16:30	Study		PART
17:00-18:30	Lecture	Humidity: characterization	AA

Wednesday, 29 Jul.

08:30-10:00	Lecture	Humidity: control	AA
10:30-13:00	Exercise	Humidity: recording instruments	JMT AA PART
15:00-16:30	Study		PART
17:00-18:30	Lecture/Film	Inspection case study/'Humidity in H.B.'	AA

Thursday, 30 Jul.

08:30-10:00	Visit	'Pienza'	FS JMT PART
10:30-13:00	Visit	'Pienza'	FS JMT PART
15:00-16:30	Visit	'Montepulciano'	FS JMT PART
17:00-18:30	Visit	'Montepulciano'	FS JMT PART

Friday, 31 Jul.

08:30-10:00	Exercise	Inspection of 'Padule'	PART
10:30-13:00	Exercise	Inspection of 'Pacule'	PART
15:00-16:30	Free		
17:00-18:30	Free		

NOTES:

UF887. WEEK : 03 AUGUST - 07 AUGUST

\* \* \* \* \*

03

\* \* \* \* \*

\* STRUCTURAL MONITORING. INTRODUCTION TO LABORATORY

\* Lecturers: A. Alva (ICCROM)  
J. M. Teutonico (ICCROM)  
L. Pontuale (UGEN-ITA)

Monday, 03 Aug.

08:30-10:00	Presentations	Inspection reports of 'Padule'	PART AA JMT
10:30-13:00	Presentations	Inspection reports of 'Padule'	PART AA JMT
15:00-16:30	Study		PART
17:00-18:30	Lecture	Structural monitoring, principles	PART

Tuesday, 04 Aug.

08:30-10:00	Lecture	Structural monitoring, inst. & records	AA
10:30-13:00	Exercise	Monitoring system: installation, 'Padule'	PART
15:00-16:30	Study		PART
17:00-18:30	Lecture	Monitoring a structure: 'Torcello', Venice	AA

Wednesday, 05 Aug.

08:30-10:00	Exercise	Structural monitoring, gauge readings	PART AA
10:30-13:00	Exercise	Structural monitoring, gauge readings	PART AA
15:00-16:30	Visit	Brick factory	JMT PART
17:00-18:30	Visit	Brick factory	JMT PART

Thursday, 06 Aug.

08:30-10:00	Lab exercise	Introduction/measurement	JMT PART (GROUP 1)
10:30-13:00	Lab exercise	Introduction/measurement	JMT PART (GROUP 2)
15:00-16:30	Study		PART
17:00-18:30	Lecture	The Plan for 'Firenze'	LP

Friday, 07 Aug.

08:30-10:00	Visit	'Firenze'	JMT PART
10:30-13:00	Visit	'Firenze'	PART JMT
15:00-16:30	Visit	'Firenze'	PART JMT
17:00-18:30	Visit	'Firenze'	PART JMT

NOTES:

UPSE7. WEEK : 10 AUGUST - 14 AUGUST

\* \* \* \* \*  
\* 04 \*  
\* \* \* \* \*

STONE, BRICK, MORTARS, SYNTHETIC PLASTICS

Lecturers: G. Terraccia (UROME-ARCOTEC-ITA)  
J. M. Teutonico (ICCROM)  
P. Rockwell (USA)  
A. Alva (ICCROM)

Monday, 10 Aug.

08:30-10:00	Study		PART
10:30-13:00	Lecture	Porous building materials	GT
15:00-16:30	Study		PART
17:00-18:30	Lecture	Porous building materials	GT

Tuesday, 11 Aug.

08:30-10:00	Lecture	Synthetic plastics	GT
10:30-13:00	Lecture	Stone conservation	GT
15:00-16:30	Study		PART
17:00-18:30	Lecture	Quarrying and carving techniques	PR

Wednesday, 12 Aug.

08:30-10:00	Visit	'Carrara'	PR JMT PART
10:30-13:00	Visit	'Carrara'	PR JMT PART
15:00-16:30	Visit	'Carrara'	PR JMT PART
17:00-18:30	Visit	'Carrara'	PR JMT PART

Thursday, 13 Aug.

08:30-10:00	Lecture	Mortars: characterization	AA
10:30-13:00	Exercise	Sampling mortars, 'Padule'	JMT PART
15:00-16:30	Lab Exercise	Mortar analysis	JMT PART (GROUP 1)
17:00-18:30	Lab Exercise	Mortar analysis	JMT PART (GROUP 2)

Friday, 14 Aug.

08:30-10:00	Exercise	Mortar preparation	JMT AA PART (ALL)
10:30-13:00	Exercise	Mortar preparation	JMT AA PART (ALL)
15:00-16:30	Study		PART
17:00-18:30	Exercise	Repointing masonry walls	AA JMT PART (ALL)

NOTES: The traditional Palio in Siena takes place on Sunday,  
16 August. A trip is planned for those wishing to attend.

LP557. WEEK : 17 AUGUST - 21 AUGUST

\* \* \* \* \*  
\* 05 \* PLASTER, RENDER, COLOUR  
\* \* \* \* \*  
\* Lecturers: J. M. Teutonico (ICCRDM)  
\* \* \* \* \*

Monday, 17 Aug.

08:30-10:00	Exercise	Explanation; drawing elevations	JMT
10:30-13:00	Exercise	Sampling architectural surfaces	JMT PART
15:00-16:30	Study		PART
17:00-18:30	Exercise	Imbedding samples	PART JMT

Tuesday, 18 Aug.

08:30-10:00	Exercise	Polishing/interpreting samples (GROUP 1)	JMT
10:30-13:00	Exercise	Polishing/interpreting samples (GROUP 2)	JMT
15:00-16:30	Study		PART
17:00-18:30	Exercise	Water colour rendering; conclusions	PART JMT

Wednesday, 19 Aug.

08:30-10:00	Lecture	Injection grouts	JMT
10:30-13:00	Demonstration	Injection grouts	JMT PART
15:00-16:30	Study		PART
17:00-18:30	Lecture	Case Study: Manoel Theatre, Malta	JMT

Thursday, 20 Aug.

08:30-10:00	Optional Visit ICCROM		JMT AA PART
10:30-13:00	Optional Visit ICCROM		JMT AA PART
15:00-16:30	Optional Visit ICCROM		JMT AA PART
17:00-18:30	Free		

Friday, 21 Aug.

08:30-10:00	Free
10:30-13:00	Free
15:00-16:30	Free
17:00-18:30	Free

NOTES:

UPSE7. WEEK : 24 AUGUST - 28 AUGUST.

\* \* \* \* \*

\* 06 \* URBAN AND TERRITORIAL CONSERVATION. CONCLUSIONS

\* \* \* \* \*

\* Lecturers: C. Cesari (ITA)  
J. M. Teutonico (ICCDROM);  
A. Alva (ICCDROM)

.....  
Monday, 24 Aug.

08:30-10:00	Lecture	Principles of Territorial Planning	CC
10:30-13:00	Review	Exercise: Typological Analysis	CC
15:00-16:30	Study		PART
17:00-18:30	Lecture	Territorial planning: Case Study	CC

.....  
Tuesday, 25 Aug.

08:30-10:00	Lecture	Integrated conservation in Ferrara	CC
10:30-13:00	Review	Exercise: re-use proposals	CC PART
15:00-16:30	Study		PART
17:00-18:30	Discussion	Integrated conservation, conclusions	CC PART

.....  
Wednesday, 26 Aug.

08:30-10:00	Visit	'San Galgano'	JMT PART
10:30-13:00	Visit	'San Galgano'	JMT PART
15:00-16:30	'Padule'	Preparation of Final Report	PART JMT AA
17:00-18:30	'Padule'	Preparation of Final Report	PART JMT AA

.....  
Thursday, 27 Aug.

08:30-10:00	Visit	'San Gimignano'	JMT PART
10:30-13:00	Visit	'San Gimignano'	JMT PART
15:00-16:30	Study		PART
17:00-18:30	Discussion	'Spannocchia': Recommendations	PART JMT AA

.....  
Friday, 28 Aug.

08:30-10:00	Presentations	Final report	DGDL JMT AA
10:30-13:00	Closing	Certificates	PART DGDL JMT AA

.....  
NOTES:

## BIBLIOGRAPHY

### Published Materials

Lengyel, Alfonz. "Santa Lucia di Rosia: Preliminary Report of the 1969 Campaign." Etruscans, No. 1 (1967-69), 45-47.

Moss, Leonard W. "Considerations for Future Campaigns." Etruscans, No. 1 (1967-69), 43-44.

[Radan with Lengyel 1974b]

Radan, George T. with Alfonz Lengyel. "The Hermitage of SS. Lucy and Anthony of Rosia: Historical Documentation of an Augustinian Hermitage" in The Church and Human Society at the Threshold of the Third Millenium, Joseph Papin, ed. The Villanova University Symposium, Vol. VI (1974), 237-255.

[Radan & Lengyel 1974a]

Radan, George T. Boris and Alfonz Lengyel. "The Eremo di S. Lucia di Rosia: Archaeological Documentation of an Augustinian Hermitage." Etruscans, No. 3 (1974), 5-33.

[Repetti 1835]

Repetti, Emanuele, compiler. Dizionario Geografico Fisica Storico della Toscana. 5 vols. Florence: Repetti, 1833-1843.

### Unpublished Materials

Reports of Excavations at Santa Lucia in 1969, 1970, 1972, 1974 contained in a scrapbook of the Etruscan Foundation and located in the museum at the Castello di Spannocchia. The scrapbook is labeled "Etruscan Foundation 1970-1975."

Field notebooks, diagrams, maps, and reports located in drawers in the main office of the Castello di Spannocchia.