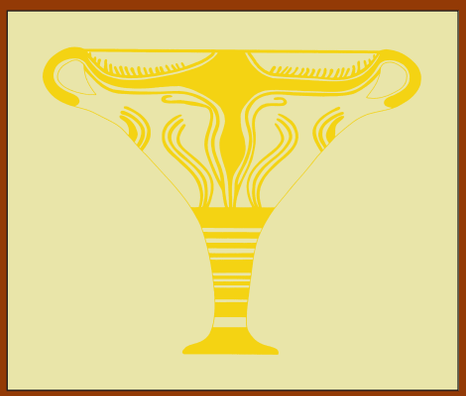
# KAVOUSI IIA

## The Late Minoan IIIC Settlement at Vronda
## The Buildings on the Summit



# KAVOUSI

## The Results of the Excavations at Kavousi in Eastern Crete

*directed by*

Geraldine C. Gesell, Leslie Preston Day,
and William D.E. Coulson

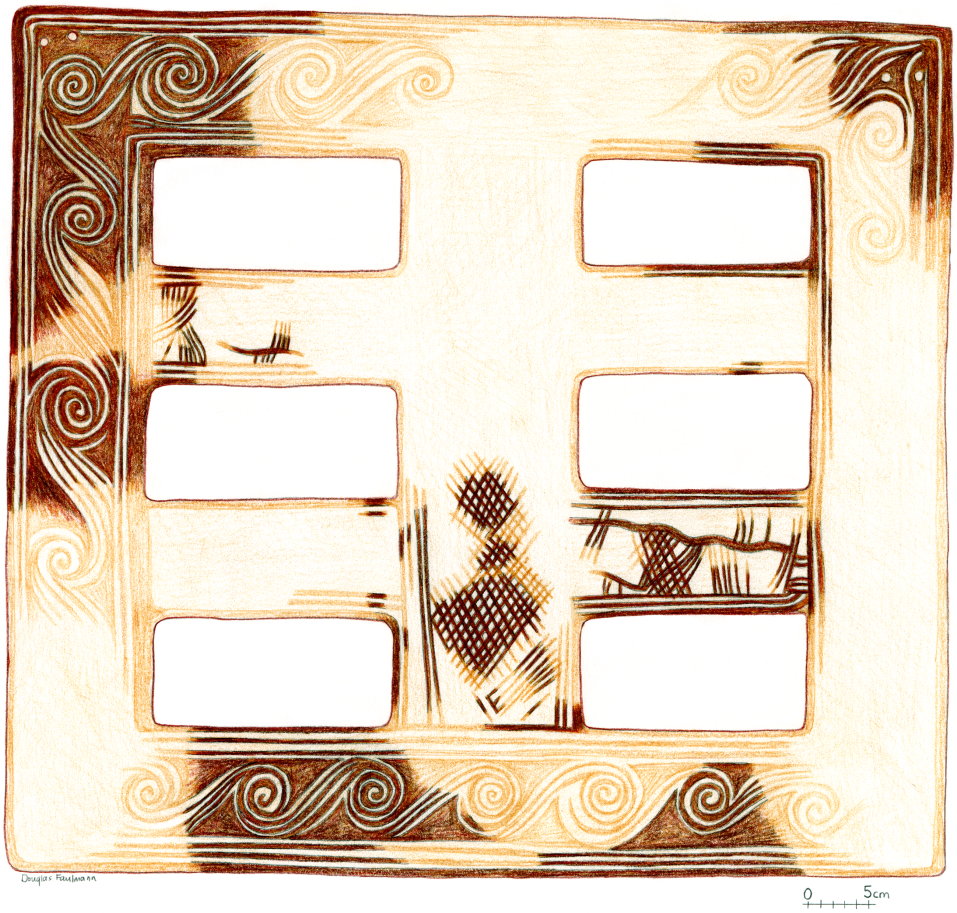
*sponsored by*

The University of Tennessee

*under the auspices of*

The American School of Classical Studies at Athens






Terracotta window frame (**B8 TC1**) from Building B, Room B8. Drawing by Douglas Faulmann.

PREHISTORY MONOGRAPHS 26

# KAVOUSI IIA

## The Late Minoan IIIC Settlement at Vronda

### The Buildings on the Summit

*by*

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# Table of Contents

List of Tables. . . . . vii

List of Charts. . . . . ix

List of Figures. . . . . xiii

List of Plates. . . . . xix

Preface. . . . . xxv

Acknowledgments. . . . . xxix

Abbreviations. . . . . xxxvii

Glossary. . . . . xxxix

1. Introduction, *Leslie Preston Day*. . . . . 1

2. Building A-B, *Leslie Preston Day* with contributions by *Heidi Dierckx, David S. Reese, and Lynn M. Snyder*. . . . . 15

Building A. . . . . 17

Periphery of Building A. . . . . 21

Building B. . . . . 33

History and Function of Building A-B. . . . . 59

3. Building P, *Leslie Preston Day* with contributions by *Heidi Dierckx, David S. Reese, and Lynn M. Snyder.* . . . . . 65

4. Building Q, *Leslie Preston Day* with contributions by *Heidi Dierckx, David S. Reese, and Lynn M. Snyder.* . . . . . 73

5. Building Complex C-D, *Nancy L. Klein* with contributions by *Heidi Dierckx, Geraldine C. Gesell, David S. Reese, and Lynn M. Snyder.* . . . . . 79

Building C. . . . . 80

Building D. . . . . 94

Periphery of Building C-D. . . . . 111

History and Function of Building C-D. . . . . 120

6. Building Complex J-K and Building R, *Lee Ann Turner* with contributions by *Heidi Dierckx, Geraldine C. Gesell, David S. Reese, and Lynn M. Snyder.* . . . . . 125

Building J. . . . . 127

Building K. . . . . 145

Building R. . . . . 155

History and Function of Building Complex J-K and Building R. . . . . 159

Appendix A: Kavousi Coarse Ware Fabrics, *Margaret S. Mook and Leslie Preston Day.* . . . . . 163

Bibliography. . . . . 169

Index. . . . . 177

Tables

Charts

Figures

Plates



# List of Tables


Table 1. Building A and periphery: summary of faunal remains.

Table 2. Building A: summary of marine shells.

Table 3. West and south of Building A: summary of marine shells.

Table 4. East of Building A: summary of marine shells.

Table 5. Building B, Room B3: summary of faunal remains.

Table 6. Building B, Room B4: summary of faunal remains.

Table 7. Building B, Rooms B4 and B7: summary of marine shells.

Table 8. Building B, Rooms B5 and B6: summary of faunal remains.

Table 9. Building B, Rooms B7 and B8: summary of faunal remains.

Table 10. Building B, Room B8: summary of marine shells.

Table 11. Building P: summary of faunal remains.

Table 12. Building P: summary of marine shells.

Table 13. Building Q: summary of faunal remains.

Table 14. Building Q, Room Q2: summary of marine shells.
Table 15. Building C, Rooms C1–C3: summary of faunal remains.
Table 16. Building C, Rooms C1–C3: summary of marine shells.
Table 17. Building C, Room C4: summary of faunal remains.
Table 18. Building C, Room C4: summary of marine shells.
Table 19. Building C, Room C5: summary of faunal remains.
Table 20. Building C, Room C5: summary of marine shells.
Table 21. Building D, Room D1: summary of faunal remains.
Table 22. Building D, Room D1: summary of marine shells.
Table 23. Building D, Rooms D2 and D3: summary of faunal remains.
Table 24. Building D, Rooms D4 and D5: summary of faunal remains.
Table 25. Building D, Rooms D3, D4, and D5: summary of marine shells.
Table 26. West and south of Building C-D: summary of faunal remains.
Table 27. West and south of Building C-D: summary of marine shells.
Table 28. East of Building C: summary of faunal remains.
Table 29. North of Building D: summary of faunal remains.
Table 30. Building J, Room J1: summary of faunal remains.
Table 31. Building J, Room J1: summary of marine shells.
Table 32. Building J, Room J2: summary of faunal remains.
Table 33. Building J, Rooms J2, J4a, and J5: summary of marine shells.
Table 34. Building J, Room J3: summary of faunal remains.
Table 35. Building J, Room J4: summary of faunal remains.
Table 36. Building J, Room J5: summary of faunal remains.
Table 37. Building K: summary of faunal remains.
Table 38. Building K: summary of marine shells.
Table 39. Building R: summary of faunal remains.
Table 40. Building R: summary of marine shells.



# List of Charts


Chart 1. Building A, Room A1: percentage of wares.

Chart 2. Building A, Room A1, floor and packing to bedrock: percentage of recognizable coarse fabrics.

Chart 3. Building A, Room A1, topsoil: percentage of recognizable coarse fabrics.

Chart 4. West of Building A, pit: percentage of wares.

Chart 5. West of Building A, pit: percentage of recognizable coarse fabrics.

Chart 6. East of Building A, terrace fill: percentage of wares.

Chart 7. East of Building A, terrace fill: percentage of recognizable coarse fabrics.

Chart 8. East of Building A, terrace fill, lowest clay layer: percentage of recognizable coarse fabrics.

Chart 9. Building B, Room B1/2: percentage of wares.

Chart 10. Building B, Room B1/2: percentage of recognizable coarse fabrics.

Chart 11. Building B, Room B3: percentage of wares.

Chart 12. Building B, Room B4: percentage of wares.

Chart 13. Building B, Room B4, roofing and floor: percentage of recognizable coarse fabrics.

Chart 14. Building B, Room B5: percentage of wares.

Chart 15. Building B, Room B5: percentage of recognizable coarse fabrics.

Chart 16. Building B, Room B6: percentage of recognizable coarse fabrics.

Chart 17. Building B, Room B7: percentage of wares.

Chart 18. Building B, Room B7, lower roofing without pithos **B7 P26**: percentage of recognizable coarse fabrics.

Chart 19. Building B, Room B7, upper roofing with pithos **B7 P26**: percentage of recognizable coarse fabrics.

Chart 20. Building B, Room B7, topsoil: percentage of recognizable coarse fabrics.

Chart 21. Building B, Room B8: percentage of wares.

Chart 22. Building B, Room B8, roofing: percentage of recognizable coarse fabrics.

Chart 23. Building P: percentage of wares.

Chart 24. Building P, red soil: percentage of recognizable coarse fabrics.

Chart 25. Building Q, Room Q2: percentage of wares.

Chart 26. Building Q, Room Q2, packing on south: percentage of recognizable coarse fabrics.

Chart 27. Building Q, Room Q2, floor: percentage of recognizable coarse fabrics.

Chart 28. Building Q, Room Q2, roofing and tumble: percentage of recognizable coarse fabrics.

Chart 29. Building C, Room C2: percentage of wares.

Chart 30. Building C, Room C2, floor deposit and roofing material: percentage of recognizable coarse fabrics.

Chart 31. Building C, Room C4: percentage of wares.

Chart 32. Building C, Room C4, below floor: percentage of recognizable coarse fabrics.

Chart 33. Building C, Room C4, floor deposit and roofing material: percentage of recognizable coarse fabrics.

Chart 34. Building C, Room C5, below floor: percentage of recognizable coarse fabrics.

Chart 35. Building C, Room C5: percentage of wares.

Chart 36. Building C, Room C5, floor deposit and roofing material: percentage of recognizable coarse fabrics.

Chart 37. Building D, Room D1: percentage of wares.

Chart 38. Building D, Room D1, floor deposit and roofing material: percentage of recognizable coarse fabrics.

Chart 39. Building D, Room D2: percentage of wares.

Chart 40. Building D, Room D3: percentage of wares.

Chart 41. Building D, Room D3, floor deposit and roofing material: percentage of recognizable coarse fabrics.

Chart 42. Building D, Room D4: percentage of wares.

Chart 43. Building D, Room D4, floor deposit and roofing material: percentage of recognizable coarse fabrics.

Chart 44. Building J, Room J1: percentage of wares.

Chart 45. Building J, Room J1, floor deposit and roofing material: percentage of recognizable coarse fabrics.

Chart 46. Building J, Room J2: percentage of wares.

Chart 47. Building J, Room J3: percentage of wares.

Chart 48. Building J, Room J4a: percentage of wares.

Chart 49. Building J, Room J4a, pit and western collapse: percentage of recognizable coarse fabrics.

Chart 50. Building J, Room J5: percentage of wares.

Chart 51. Building J, Room J5, floor surface and rubble: percentage of recognizable coarse fabrics.

Chart 52. Building K, Room K1: percentage of wares.

Chart 53. Building K, Room K1, roofing material: percentage of recognizable coarse fabrics.

Chart 54. Building K, Room K2: percentage of wares.

Chart 55. Building K, Room K2, sounding: percentage of recognizable coarse fabrics.

Chart 56. Building K, Room K3: percentage of wares.

Chart 57. Building K, Room K3, floor surface and pit: percentage of recognizable coarse fabrics.

Chart 58. Building K, Room K4: percentage of wares.

Chart 59. Building K, Room K4, trash heap/buttress: percentage of recognizable coarse fabrics.

Chart 60. Building R, Room R1a: percentage of wares.



# List of Figures


Figure 1. Plan of Kavousi area.

Figure 2. Vronda, state plan.

Figure 3. Vronda, plan of grid over site.

Figure 4. Vronda, plan of LM IIIC settlement.

Figure 5. Vronda east–west section across site.

Figure 6. Building A-B, state plan.

Figure 7. Building A-B, LM IIIC plan.

Figure 8. Building A, pottery: fine (**A1 P2**, **A1 P3**), medium-coarse (**A1 P4**–**A1 P6**), coarse (**A1 P1**), and pithos (**A1 P7**) wares; north of Building A, pottery: coarse ware (**AN P1**).

Figure 9. West of Building A: section d–d' of west balk of V 2600.

Figure 10. West of Building A, V 2600, pottery: fine (**AW P1**–**AW P6**) and medium-coarse (**AW P7**–**AW P14**) wares.

Figure 11. West of Building A, V 2600, pottery: cooking wares (**AW P15**–**AW P19**).

Figure 12. West of Building A, V 2600, pottery: cooking (**AW P20**–**AW P27**) and coarse (**AW P28**–**AW P32**) wares.

Figure 13. West of Building A, V 2600, pottery: coarse (**AW P33**–**AW P37**) and pithos (**AW P39**) wares; terracotta (**AW TC1**).

Figure 14. East of Building A: plan and east–west section a–a' of south balk of V 3900.

Figure 15. East of Building A: east–west section b–b' of north balk of V 2900.

Figure 16. East Terrace fill, lowest level, pottery: fine (**AE P3**, **AE P4**) and cooking (**AE P1**, **AE P2**, **AE P5**–**AE P7**) wares; rubble layer, pottery: fine wares (**AE P8**–**AE P19**).

Figure 17. East Terrace fill, rubble layer, pottery: fine (**AE P20**–**AE P28**) and medium-coarse (**AE P29**–**AE P37**) wares.

Figure 18. East Terrace fill, rubble layer, pottery: cooking (**AE P38**–**AE P43**) and coarse (**AE P44**–**AE P57**) wares; terracotta (**AE TC1**).

Figure 19. East Terrace fill, surface, pottery: fine (**AE P58**–**AE P70**), coarse (**AE P71**, **AE P72**), and pithos (**AE P73**) wares.

Figure 20. Building B: east–west section a–a' across Rooms B3, B1/2, B4, and B6.

Figure 21. Building B: north–south section b–b' across Rooms B3 and B7.

Figure 22. Building B, Room B3, pottery: fine wares (**B3 P1**–**B3 P8**).

Figure 23. Building B, Room B3, pottery: fine (**B3 P9**–**B3 P13**) and coarse (**B3 P14**–**B3 P19**) wares.

Figure 24. Building B, Room B3, pottery: pithos wares (**B3 P20**–**B3 P23**).

Figure 25. Building B, Room B4, pottery: fine wares (**B4 P1**–**B4 P11**).

Figure 26. Building B, Room B4, pottery: fine wares (**B4 P12**–**B4 P24**).

Figure 27. Building B, Room B4, pottery: krater **B4 P25**.

Figure 28. Building B, Room B4, pottery: kraters (**B4 P26**, **B4 P27**) and stirrup jars (**B4 P28**–**B4 P30**).

Figure 29. Building B, Room B4, pottery: fine wares (**B4 P31**–**B4 P36**).

Figure 30. Building B, Room B4, pottery: medium-coarse (**B4 P37**–**B4 P40**) and cooking (**B4 P41**–**B4 P45**) wares.

Figure 31. Building B, Room B4, pottery: cooking (**B4 P46**–**B4 P51**) and coarse (**B4 P52**–**B4 P56**) wares.

Figure 32. Building B, Room B5, pottery: fine (**B5 P1**), medium-coarse (**B5 P2**, **B5 P3**), cooking (**B5 P4**, **B5 P5**, **B5 P9**), coarse (**B5 P6**, **B5 P10**, **B5 P11**), and pithos (**B5 P7**, **B5 P8**) wares.

Figure 33. Building B, Room B6, pottery: fine (**B6 P1**–**B6 P6**), medium-coarse (**B6 P7**–**B6 P10**, **B6 P21**), cooking (**B6 P11**), coarse (**B6 P12**–**B6 P19**), and pithos (**B6 P20**) wares.

Figure 34. Building B, east–west section c–c' through Rooms B7 and B8.

Figure 35. Building B, Room B7: architectural section showing north wall (Wall C).

Figure 36. Building B, Room B7: ideal east–west stratigraphic section.

Figure 37. Building B, Room B7, lower deposit, pottery: fine wares (**B7 P1**–**B7 P11**).

Figure 38. Building B, Room B7, lower deposit, pottery: fine (**B7 P12**, **B7 P13**), medium-coarse (**B7 P14**), cooking (**B7 P15**–**B7 P17**), and coarse (**B7 P18**–**B7 P20**) wares.

Figure 39. Building B, Room B7, upper deposit and surface, pottery: fine (**B7 P21**–**B7 P24**) and cooking (**B7 P25**) wares.

Figure 40. Building B, Room B7, lower deposit, pithos **B7 P26**.

Figure 41. Building B, Room B7, upper deposit and surface, pottery: coarse wares (**B7 P27**–**B7 P29**); Room B8, pottery: fine (**B8 P1**–**B8 P3**), medium-coarse (**B8 P4**), cooking (**B8 P5**, **B8 P6**), and coarse (**B8 P7**) wares.

Figure 42. Building B, Room B8, pottery: coarse wares (**B8 P8**–**B8 P11**).

Figure 43. Building B, Room B8: terracotta window frame (**B8 TC1**).

Figure 44. Building A-B, architectural phases.

Figure 45. Building P, state plan.

Figure 46. Building P, east–west section a–a' of north balk of V 2800.

Figure 47. Building P, lowest level, pottery: fine (**P P1**–**P P6**), medium-coarse (**P P7**–**P P9**), and cooking (**P P10**–**P P12**) wares.

Figure 48. Building P, red soil, pottery: fine wares (**P P13**–**P P39**).

Figure 49. Building P, red soil, pottery: medium-coarse (**P P40**–**P P45**) and cooking (**P P46**–**P P62**) wares.

Figure 50. Building P, red soil, pottery: cooking (**P P63**–**P P66**), coarse (**P P67**–**P P84**), and pithos (**P P85**, **P P86**) wares; terracotta nodulus **P TC1**.

Figure 51. Building Q, plan.

Figure 52. Building Q, north–south section a–a' of east balk.

Figure 53. Building Q, Room Q2, lower deposit, pottery: fine (**Q2 P1**, **Q2 P2**), cooking (**Q2 P3**–**Q2 P5**), and coarse (**Q2 P6**) wares; floor deposit, pottery: fine ware (**Q2 P7**–**Q2 P13**).

Figure 54. Building Q, Room Q2, floor, pottery: cooking (**Q2 P14**, **Q2 P15**) and coarse (**Q2 P16**–**Q2 P20**) wares; rock tumble and surface, pottery: pithos ware (**Q2 P21**).

Figure 55. Building C-D, state plan.

Figure 56. Building C-D, LM IIIC plan.

Figure 57. Building C, Room C1: east–west section a–a'.

Figure 58. Building C, Room C1, pottery: fine (**C1 P1**, **C1 P2**, **C1 P4**–**C1 P6**), coarse (**C1 P7**), and pithos (**C1 P3**, **C1 P8**) wares.

Figure 59. Building C, Room C2: east–west section b–b'.

Figure 60. Building C, Room C2, pottery: fine (**C2 P1**–**C2 P3**), medium-coarse (**C2 P4**), cooking (**C2 P5**, **C2 P6**), and pithos (**C2 P7**) wares.

Figure 61. Building C, Rooms C3 and C4, pottery: fine (**C3 P1**, **C3 P2**, **C4 P3**–**C4 P5**), medium-coarse (**C4 P1**, **C4 P2**, **C4 P6**–**C4 P8**), cooking (**C3 P3**), and coarse (**C3 P4**) wares; terracotta loomweight (**C3 TC1**).

Figure 62. Building C, Room C4: east–west section c–c'.

Figure 63. Building C, Rooms C4 and C5, objects: figurines (**C4 F1**, **C5 F1**, **C5 F2**), terracottas (**C4 TC1**, **C4 TC2**), and stone objects (**C4 S1**, **C5 S1**).

Figure 64. Building C, Room C5: east–west section d–d'.

Figure 65. Building C, Room C5, pottery: fine (**C5 P1**, **C5 P2**, **C5 P10**–**C5 P13**), cooking (**C5 P3**–**C5 P5**), and coarse (**C5 P6**–**C5 P9**, **C5 P14**) wares.

Figure 66. Building D, Room D1: east–west section e–e'.

Figure 67. Building D, Room D1, western half, pottery: fine (**D1 P1**, **D1 P3**), cooking (**D1 P4**, **D1 P5**), coarse (**D1 P2**, **D1 P6**, **D1 P7**), and pithos (**D1 P8**, **D1 P9**) wares.

Figure 68. Building D, Room D1, eastern half, pottery: fine (**D1 P10**, **D1 P11**), medium-coarse (**D1 P12**), cooking (**D1 P13**), and coarse (**D1 P14**, **D1 P15**) wares.

Figure 69. Building D, Room D1: animal figurines (**D1 F1**–**D1 F3**).

Figure 70. Building D, Room D2: north–south section f–f'.

Figure 71. Building D, Room D2, pottery: fine (**D2 P4**) and pithos (**D2 P1**–**D2 P3**) wares.

Figure 72. Building D, Room D3, pottery: fine (**D3 P6**, **D3 P7**), cooking (**D3 P1**–**D3 P3**), and coarse (**D3 P4**, **D3 P5**, **D3 P8**) wares; stone object (**D3 S1**).

Figure 73. Building D, Room D4: east–west section g–g'.

Figure 74. Building D, Room D4, pottery: fine (**D4 P1**), cooking (**D4 P2**, **D4 P3**), and coarse (**D4 P4**, **D4 P5**) wares.

Figure 75. Building D, Room D4, pottery: fine (**D4 P9**–**D4 P13**), coarse (**D4 P6**, **D4 P14**, **D4 P15**), and pithos (**D4 P7**, **D4 P8**) wares.

Figure 76. Building D, Room D5: east–west section h–h'.

Figure 77. Building D, Room D5, pottery: fine (**D5 P1**–**D5 P3**), cooking (**D5 P4**, **D5 P5**), and coarse (**D5 P6**, **D5 P8**, **D5 P9**), and Venetian glazed (**D5 P7**) wares; terracotta (**D5 TC1**).

Figure 78. West and south of Building C-D, pottery: fine (**CDW P2**, **CS P1**, **CS P6**, **CS P7**), medium coarse (**CDW P3**, **CS P8**, **CS P9**), cooking (**CDW P1**, **CS P2**, **CS P5**), and coarse (**CDW P4**, **CDW P5**, **CS P3**, **CS P4**) wares; stone object (**CS S1**).

Figure 79. East of Building C, pottery: fine (**CE P1**–**CE P6**), medium-coarse (**CE P7**–**CE P10**), and cooking (**CE P11**–**CE P17**) wares.

Figure 80. East of Building C, pottery: cooking (**CE P40**, **CE P41**), coarse (**CE P18**–**CE P39**), and pithos (**CE P42**, **CE P43**) wares.

Figure 81. Building C-D, phase plans.

Figure 82. Building J-K, state plan.

Figure 83. Building J-K, LM IIIC plan.

Figure 84. Buildings J-K and R: north–south section b–b'.

Figure 85. Building J: east–west section d–d' through J1 and J2.

Figure 86. Building J: east–west section c–c' through J1 and J5.

Figure 87. Building J, Room J1, gray roofing material in west, pottery: fine (**J1 P1**–**J1 P16**) and medium-coarse (**J1 P17**–**J1 P21**) wares.

Figure 88. Building J, Room J1, gray roofing material in west, pottery: cooking wares (**J1 P22**–**J1 P27**).

Figure 89. Building J, Room J1, gray roofing material in west, pottery: coarse (**J1 P28**) and pithos (**J1 P29**) wares.

Figure 90. Building J, Room J1, red roofing material in east, pottery: fine (**J1 P30**), medium-coarse (**J1 P31**, **J1 P32**), and cooking (**J1 P33**–**J1 P35**) wares.

Figure 91. Building J, Room J1, red roofing material in east, pottery: cooking (**J1 P36**–**J1 P39**) and coarse (**J1 P40**, **J1 P41**) wares.

Figure 92. Building J, Room J2, pottery: fine (**J2 P2**), medium coarse (**J2 P3**), cooking (**J2 P1**), and coarse (**J2 P4**) wares; terracotta (**J2 TC1**).

Figure 93. Building J: east–west section e–e' through J3 and J4.

Figure 94. Building J: east–west section f–f' through J3, J4b, J4c, J4d, and Graves 10, 12, and 20.

Figure 95. Building J, Room J3, pottery: fine wares (**J3 P1**–**J3 P9**).

Figure 96. Building J, Room J3, pottery: fine (**J3 P14**), medium-coarse (**J3 P10**–**J3 P12**), and cooking (**J3 P13**) wares; terracotta (**J3 TC1**).

Figure 97. Building J, Room J4, area J4a, pottery: fine (**J4 P1**–**J4 P13**) and medium-coarse (**J4 P14**–**J4 P23**) wares.

Figure 98. Building J, Room J4, area J4a, pottery: cooking (**J4 P24**–**J4 P30**) and coarse (**J4 P31**, **J4 P32**) wares.

Figure 99. Building J, Room J4, areas J4a, J4b, and J4d, pottery: cooking (**J4 P34**) and coarse (**J4 P33**, **J4 P35**) wares; glass object (**J4 G1**).

Figure 100. Building J, Room J5, pottery: fine (**J5 P1**–**J5 P6**, **J5 P12**), medium-coarse (**J5 P7**), and cooking (**J5 P8**–**J5 P11**) wares.

Figure 101. Building K: north–south section a–a' through K1.

Figure 102. Building K, Room K1, pottery: fine (**K1 P1**–**K1 P3**, **K1 P7**), medium-coarse (**K1 P4**), cooking (**K1 P5**), and pithos (**K1 P6**) wares; terracotta (**K1 TC1**); figurine (**K1 F1**).

Figure 103. Building K, Room K3, pottery: fine (**K3 P1**–**K3 P11**), medium-coarse (**K3 P12**, **K3 P13**), and cooking (**K3 P14**) wares.

Figure 104. Building K, Room K3, pottery: cooking (**K3 P15**–**K3 P18**, **K3 P21**), coarse (**K3 P19**), and pithos (**K3 P20**) wares; terracottas (**K3 TC1**, **K3 TC2**).

Figure 105. Building K, Room K4, pottery: fine (**K4 P1**–**K4 P13**), medium-coarse (**K4 P14**), cooking (**K4 P15**–**K4 P18**), and coarse (**K4 P19**) wares.

Figure 106. Building R: east–west section g–g' through R1a and R2.

Figure 107. Building R, Room R1a, pottery: Venetian fine glazed (**R1 P4**) and cooking (**R1 P1**–**R1 P3**) wares; iron “arrowhead” (**R1 M1**); possibly Venetian terracotta (**R1 TC1**).

Figure 108. Buildings J, K, and R, phase plans.



# List of Plates


Plate 1A. View of Vronda from west.

Plate 1B. View of Kavousi from north.

Plate 2A. Aerial view of Vronda.

Plate 2B. Building B, Room B1/2 before excavation.

Plate 3A. East Terrace Wall east of Building A.

Plate 3B. Building A, Room A1 from south.

Plate 3C. Building A, Room A1, aerial view, showing east wall (V 2805) with north at left.

Plate 3D. Building A, Room A1, linear accumulation from north.

Plate 3E. Pithos **A1 P7**.

Plate 4A. Building A, Room A2, north and south walls from north.

Plate 4B. Terracotta tile **AW TC1**.

Plate 4C. West of Building A, pit with cooking pots.

Plate 4D. West of Building A, pit with mudbrick.

Plate 4E. West of Building A, mudbrick.

Plate 5A. Tripod cooking pot **AW P16**.

Plate 5B. Conical cup **AW P28**.

Plate 5C. Jar **AW P38**.

Plate 5D. East Terrace Wall from north.

Plate 5E. Platform east of Building A, Room A1 from south.

Plate 5F. East Terrace fill from south.

Plate 6A. Barbotine ware (**AE P61**) and vessel with impressed spirals (**AE P62**).

Plate 6B. Building B, Room B1/2 from north.

Plate 6C. Building B, Room B1/2, showing abutment of Walls I and D from west.

Plate 6D. Building B, Room B3, west wall from east.

Plate 6E. Building B, Room B3, floor.

Plate 6F. Building B, Room B3, pithos 1 (**B3 P20**) from south.

Plate 7A. Building B, Room B3, pithos 2 (**B3 P21**) from north.

Plate 7B. Building B, Room B3, pithos 3 (**B3 P22**) from north.

Plate 7C. Kylikes **B3 P3** and **B3 P4**.

Plate 7D. Pithos **B3 P20**.

Plate 7E. Pithos **B3 P21**.

Plate 7F. Pithos **B3 P22**.

Plate 8A. Building B, Room B3, stone tools (**B3 ST1**, **B3 ST2**) and door pivot V83.18.

Plate 8B. Building B, Room B4, pottery deposits in north.

Plate 8C. Building B, Room B4, bone and pottery deposits in south.

Plate 8D. Building B, Room B4, pottery: cup (**B4 P3**), champagne cup (**B4 P11**), deep bowl (**B4 P12**), bowl (**B4 P21**), and stirrup jar (**B4 P28**).

Plate 8E. Krater **B4 P25**.

Plate 8F. Lekane (**B4 P37**) and jug (**B4 P38**).

Plate 9A. Cooking dish **B4 P41**.

Plate 9B. Building B, Room B5, cobble fill from east.

Plate 9C. Building B, Room B6, aerial view (north at left).

Plate 9D. Building B, Room B6, pot stand against Wall H with pithos/basin **B6 P20** from west.

Plate 9E. Building B, Room B6, cupule or kernos from west.

Plate 9F. Conical cup **B6 P7**.

Plate 10A. Building B, Room B6, stone tools: pebbles (**B6 ST1**, **B6 ST4**), hand tool (**B6 ST2**), and polisher (**B6 ST3**).

Plate 10B. Building B, Room B7, north wall (Wall C) from south.

Plate 10C. Building B, Room B7, aerial view (north to left).

Plate 10D. Building B, Room B7, pithos **B7 P26** during excavation, 1983.

Plate 10E. Building B, Room B7, pithos **B7 P26** during excavation, 1987.

Plate 10F. Deep bowl **B7 P4**.

Plate 11A. Krater **B7 P9**.

Plate 11B. Pithos **B7 P26**.

Plate 11C. Close-up of pithos **B7 P26** decoration.

Plate 11D. Building B, Room B8, west wall from east, showing bench.

Plate 11E. Building B, Room B8, bin in corner as seen from south.

Plate 11F. Building B, Room B8, linear accumulation and window frame from west.

Plate 12A. Window frame **B8 TC1**.

Plate 12B. Building P, aerial view, showing bin (north to left).

Plate 12C. Nodulus **P TC1**, showing fingerprints.

Plate 12D. Building Q from west.

Plate 12E. Lead objects from Vonda settlement: lead run offs (E2 M1, **Q2 M1**), lead vessel (NW M1).

Plate 12F. Building C, Room C1 from west, showing east wall.

Plate 12G. Building C, Room C1, aerial view of southwestern corner (north at top).

Plate 13A. Building C, Room C1, pithos on floor.

Plate 13B. Building C, Room C2, hearth.

Plate 13C. Building C, Room C2, aerial view, showing oven (north at top).

Plate 13D. Building C, Room C2 from west, showing oven and flue.

Plate 14A. Building C, Room C2 from west, showing fenestrated stand **C2 P4** in oven.

Plate 14B. Fenestrated stand **C2 P4**.

Plate 14C. Building C, Room C2, stone tools: hand tools (**C2 ST1**, **C2 ST3**, **C2 ST5**), grinder (**C2 ST2**), and whetstone (**C2 ST4**).

Plate 14D. Building C, Room C4 from south, showing cist (Grave 5) and pit.

Plate 15A. Building C, Room C4 from north, showing bench.

Plate 15B. Building C, Room C4 from southwest, showing oven.

Plate 15C. Building C, Room C4, close-up of oven.

Plate 15D. Building C, Room C5 from east, showing hearth or oven.

Plate 15E. Building C, Room C5 from northwest, showing floor paving.

Plate 16A. Building D, Room D1, Wall V 5103 from northwest.

Plate 16B. Building D, Room D1, aerial view, showing platform in corner (north at top).

Plate 16C. Building D, Room D1 from north, showing platform and pottery.

Plate 16D. Building D, Room D1 from north, showing post bases.

Plate 16E. Building D, Room D1, animal figurines (**D1 F1**, **D1 F2**) on platform.

Plate 16F. Animal figurines (**D1 F1**–**D1 F3**).

Plate 17A. Krater **D1 P10**.

Plate 17B. Jug **D1 P14**.

Plate 17C. Building D, Room D1, stone tools (**D1 ST2**, **D1 ST3**, **D1 ST8**–**D1 ST14**).

Plate 18A. Building D, Room D2, aerial view (north to left).

Plate 18B. Building D, Room D2, west wall from east.

Plate 18C. Building D, Room D2, floor (V 12922) from south.

Plate 18D. Building D, Room D2, second surface (V 12814, V 12917) from south with slab and pithoi.

Plate 19A. Building D, Room D2, pithos in roofing from south.

Plate 19B. Building D, Room D3, aerial view (north at top).

Plate 19C. Building D, Room D3, tripod cooking pot (**D3 P3**) smashed on top of paving slab from southwest.

Plate 19D. Building D, Room D4, south wall (V 12920) from north showing blocked door.

Plate 19E. Building D, Room D4, aerial view, showing walls and Bench V 5006 (north at top).

Plate 19F. Lekane **D4 P4**.

Plate 20A. Building D, Room D4, stone tools: whetstones (**D4 ST1**, **D4 ST2**) and querns (**D4 ST3**, **D4 ST4**).

Plate 20B. Building D, Room D5, aerial view (north at top).

Plate 20C. Building D, Room D5, stone tools: hand tools (**D5 ST2**, **D5 ST4**), grinder (**D5 ST3**), and whetstone or pestle (**D5 ST5**).

Plate 20D. West of Building C-D, terrace wall V 11803 from west.

Plate 21A. West of Building C-D, terrace wall V 11803 from north.

Plate 21B. South of Building C, surface with strainer **CS P4**.

Plate 21C. Strainer **CS P4**.

Plate 21D. Bowl **CE P4**.

Plate 22A. Building J, Room J1 from west.

Plate 22B. Building J, Room J1, cobbled surface on bedrock from south.

Plate 22C. Building J, Room J1, stone tools: mortar (**J1 ST1**), hand tools (**J1 ST2**, **J1 ST4**), possible weight (**J1 ST3**), and saddle quern (**J1 ST5**).

Plate 22D. Building J, Room J2, west wall and ledge from east.

Plate 22E. Building J, Room J2, door from south.

Plate 22F. Lekane **J2 P4**.

Plate 23A. Building J, Room J3, west wall from east.

Plate 23B. Pottery from Room J3: kylix (**J3 P4**), stirrup jar (**J3 P8**), and fenestrated stand (**J3 P10**).

Plate 23C. Miscellaneous objects from Building Complex J-K and Building R: shell vase attachment (**J3 P14**), glass object (**J4 G1**), figurine (**K1 F1**), stone object (**K2 S1**), iron arrowhead (**R1 M1**), terracotta objects (**J3 TC1**, **K1 TC1**, **K3 TC1**, **K3 TC2**, **R1 TC1**).

Plate 23D. Building J, Room J4, area J4a from west.

Plate 23E. Building J, Room J4, area J4c from south, showing Graves 10, 12, 17; Room R2 is in the foreground.

Plate 24A. Building J, Room J5, northeastern corner from west.

Plate 24B. Building K, Rooms K1–K2 from southwest, showing door between.

Plate 24C. Building K, Room K1 from southeast, showing Grave 16; Wall V 6202/6310 and Bench V 6209/6316 in foreground.

Plate 24D. Building K, Rooms K1–K2, stone tools: hand tool (**K1 ST1**), polisher (**K1 ST2**), and pebble (**K2 ST1**).

Plate 24E. Building K, Room K2 from west.

Plate 24F. Building K, Room K2, bin or pot stand (V 6403).

Plate 25A. Building K, Room K3, bench, aerial view.

Plate 25B. Building K, Rooms K3–K4, pit and wall between.

Plate 25C. Building J, Room K3, stone tools: hand tools (**K3 ST1**, **K3 ST4**–**K3 ST6**) and saddle querns (**K3 ST2**, **K3 ST3**).

Plate 25D. Building R, wall between Rooms R1a and R2 from south.

Plate 25E. Building R, Room R1a from west.

Plate 25F. Building R, Room R1a, hearth from south.



# Preface

*Kavousi* IIA: *The Late Minoan IIIC Settlement at Vronda. The Buildings on the Summit* is the second in the series of final reports on the work of the Kavousi Project and the first volume on the cleaning (1982–1984) and excavations (1987–1992) at the sites located above the modern village of Kavousi in eastern Crete. The final report on the survey of the Kavousi area can be found in *Kavousi* I: *The Archaeological Survey of the Kavousi Region* (Haggis 2005), along with further information on the history of archaeological investigation in the Kavousi area, including a fuller description of the chronology of the Kavousi Project.

The sites in the Kavousi area, first explored by Harriet Boyd (Hawes) in 1900, originally elicited the interest of the project directors because of their potential to shed light on the Early Iron Age, the transitional period in Cretan history known popularly as the Dark Ages. At the time the Project began, this period was not well understood, particularly on Crete, where archaeological activity had understandably focused on the palatial society and the periods leading up to it. What was known of the Early Iron Age came primarily from material excavated from graves by early 20th-century archaeologists, and a few single-period habitation sites like Karphi (Pendlebury, Pendlebury, and Money-Coutts 1937–1938). The last four decades of the century saw a renewed interest in the Dark Ages that included new syntheses of the era (Desborough 1964, 1972; Snodgrass 1971; Coldstream 1977) along with spectacular new archaeological finds, such as those at Lefkandi

(Popham, Sackett and Themelis, eds., 1980; Popham, Calliagas, and Sackett, eds., 1993; Popham and Lemos 1996). On Crete, interest in the period was spurred by the publication of the Karphi pottery in 1960 (Seiradaki 1960) and new excavations at Kastri Palaikastro (Sackett, Popham, and Warren 1965), Prinias (Rizza, Palermo, and Tomasello 1992), Chania (Hallager and Hallager, eds., 2000), and the North Cemetery at Knossos (Coldstream and Catling, eds., 1996). Little work, however, had been done in East Crete at the time.

The Kavousi Project was thus conceived as a multidisciplinary regional study of an important area of East Crete, with a focus on the Early Iron Age mountain sites above Kavousi. The Project was carried out in two phases, beginning in 1978. The first phase included the study of the surviving artifacts and architecture found by earlier investigators at Kavousi. This phase of study of the material from Kavousi indicated that renewed excavations at Vronda and the Kastro, with their settlements and cemeteries that lasted from LM IIIC through the Early Orientalizing period, could provide a unique opportunity to explore the entire Dark Ages and potentially answer questions about the history, chronology, and society of the era. Thus the next phase of the project, which began in 1987, was a five-year program of excavation at Vronda and the Kastro, together with a surface survey of the Kavousi area to place the sites within a broader historical and environmental context. That there were contemporary remains along with those of later periods on the third site of Azoria was not clear until after the surface survey showed the chronological range and geographical extent of that site, and lack of time and resources made investigation impossible there. The subsequent independent excavations at Azoria by Donald Haggis and Margaret Mook, however, have filled in that gap (Haggis et al. 2004; Haggis et al. 2007). This first phase of the project also included a geophysical survey at Vronda, core drilling for pollen samples at Ammoudara in the area of Hagios Nikolaos, and extensive study of the soils and agricultural potential of the Kavousi area and other areas of East Crete. The excavations at Vronda and the Kastro were designed to recover not only the traditional architectural and artifactual remains, but also to include the study of the human and animal bones and palaeobotanical remains recovered through water sieving.

The investigators identified a number of questions which could be answered by the opening of excavations at Kavousi, and new questions naturally arose during the course of the survey, excavation, and analysis. The first goal was to determine the chronological and social relationships among the Early Iron Age settlements in the Kavousi area. It was originally thought that Vronda was the earlier of the two settlements, dating almost exclusively to the LM IIIC period, and that the Kastro began only after the abandonment of the Vronda settlement. The investigators hoped to be able to understand the reasons for the shifting pattern of settlement in the Kavousi area that might help to explain changes observable elsewhere in the island. As it became clear that the Kastro was the earlier inhabitation of the Early Iron Age and that the settlements overlapped in the 12th century, more attention was focused on determining the relationships between the two settlements by a comparison of architecture, pottery, and other objects. Of particular importance was the petrographic analysis of the coarse wares from the two sites to determine the differences and similarities in production and trade both synchronically and diachronically. A second important aim was to discover as much as possible about the lifeways of the people of Kavousi in the period and how these may have changed over time.

Since it became clear that Vronda was predominantly a single-period site, the goal of excavation there was to uncover as much as possible of the settlement of the

LM IIIC period, to recover the buildings and objects used by or left behind by its inhabitants, and to reconstruct the social organization and lives of the people who lived there in the 12th century. At the onset of excavations, Karphi was the only extensively excavated LM IIIC settlement in Crete and only subsequently did other settlements, like nearby Chalasmenos, come to light. For complete recovery of the plan of the settlement at Vronda, trenches were excavated all over the ridge and around the periphery. Work focused on areas where less disturbance had occurred or which were of particular interest, such as the large house on the summit and the religious building on the southwest.

At Kastro, the original goal was to recover what appeared to be a large settlement of the Geometric period, but it was soon apparent that the site was inhabited over a long period of time, from the earliest phase of the LM IIIC period down into the 7th century. The aims of the excavation on the Kastro shifted from the recovery of a single-period settlement to an investigation of the stratified remains that revealed the entire history of the town. This meant excavating more deeply in a smaller number of places, rather than more extensive recovery of the buildings of the last phase. The recovery of stratified floors of continuous habitation have established a ceramic sequence for Kavousi and helped to clarify the pottery chronology in East Crete.

Another goal of the excavations was to explore the cemeteries around the sites at Kavousi to understand better the shifting location of graves and burial practices in the area, to learn something about the health and heredity of the population, and to discover more about the social and political structures and religious beliefs of the inhabitants of the area. Although great effort was expended in trying to locate more tholos tombs around both settlements, only one new tholos was found at Vronda, and that had been completely robbed. The unexpected Late Geometric cemetery of cremation burials at Vronda, however, provided a new type of primary cremation, known before only at nearby Vrokastro, but later paralleled by the cemetery at Eleutherna. Much of the resources of the project went into the careful recovery of these graves.

The results of the excavations at Vronda and the Kastro are presented in six volumes. *Kavousi* II is devoted to the material from the settlement at Vronda. The remainder of the volumes of the Kavousi series include the following: *The Shrine at Vronda; The Geometric Cemetery at Vronda; The Pottery from the Kastro; The Architecture and Stratigraphy of the Kastro;* and *The Early Excavations at Kavousi*.

The publication of the Vronda site appears in three volumes: one on the LM IIIC settlement, one on the LM IIIC shrine, and a third on the Late Geometric cremation cemetery. This first Vronda volume on the LM IIIC settlement is divided into three parts. The first part treats the material from the houses on the summit of the Vronda ridge (Buildings A-B, C-D, J-K, and Q), along with earlier (Building P) and later (Building R) structures around them. The second part, *Kavousi* IIB (Day and Glowacki, forthcoming), presents the material from the structures on the slopes of the Vronda ridge (Buildings E, I-O-N, L-M, the Kiln) and on the periphery. The final part, *Kavousi* IIC (Day et al., forthcoming), is devoted to specialist analyses of the architecture, pottery, finds, and floral and faunal remains.

Briefly, the history of archaeological investigations at Kavousi is as follows. In 1900 Harriet Boyd uncovered some buildings on the summit of the Vronda ridge, which were not given thorough publication, and eight tholos tombs of Subminoan date, for which some photos and lists of contents were published. After Boyd's brief exploration of the Kavousi area, interest in Vronda declined, but in 1951 a local landowner, Giorgos Sekadakis, discovered another tholos tomb (Vronda IX)

in the area. Modern work began on Vronda with the clearing of Boyd's tombs by William Coulson, Leslie Day, and Geraldine Gesell in 1981. The cleaning of the buildings of the Vronda settlement began in 1983 and continued in 1984. When excavations began in 1987, the Vronda settlement was a major focus, and work continued there in all seasons, from 1987 to 1990 and again in 1992. At that time it became clear that the settlement belonged to the Late Minoan IIIC period, and that the area of the settlement had been used in the Geometric period as a cemetery long after its abandonment. Remains of earlier periods (EM II–III, MM I–II, MM III–LM IA) also appeared.

The work on the summit of Vronda was undertaken by many people during the years of excavation. In 1983, the cleaning of Building A-B was conducted by the three directors: Geraldine Gesell, Leslie Day, and William Coulson. In 1984, the investigation at Vronda was supervised by the three directors, with the addition of Margaret Mook, George Rochefort, James Rehard, and Joseph Day. On the summit, parts of Buildings A-B, C-D, and R were cleaned in that season. In 1987 excavations commenced with Leslie Day as field director. Work concentrated on the peripheral areas, and only parts of Buildings B and C-D were explored on top of the ridge by trench supervisors Marina Markantonatos and Susan Springer. In 1988 trench supervisors James Higginbotham, John Lenz, Julia Shear, and Lee Ann Turner excavated the area of Building J-K; Building C-D was investigated in that season by Kevin Baldwin. The 1989 season saw more work in Building C-D by Nancy Klein and Catherine Woolfit and in Building J-K by Lee Ann Turner. In 1990, Deanne Dicer and Nancy Klein continued the work in Building C-D, and Lee Ann Turner in Building J. Finally, in 1992 excavation was carried out in Buildings C-D and J-K by Nancy Klein, and in Buildings A-B and P by Leslie Day. Many student assistants and local workers from Kavousi village devoted much time and effort in the excavations in all years.

This first volume on the Vronda settlement has been jointly authored, and the name of its particular author has been placed at the head of each chapter. Everything within a chapter, including the catalog entries, is the work of this author except for the following: the catalogs and discussions of terracotta figurines are by Geraldine C. Gesell; the discussions and catalogs of stone tools are by Heidi Dierckx; the discussion and tables of vertebrate faunal remains are by Lynn M. Snyder; tables and discussions of marine shells are based on the work of David S. Reese; identifications and discussions of paleobotanical remains are based on the research of Kimberly Flint-Hamilton.

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# *Staff List*

The excavations at Kavousi have been conducted by a staff of archaeologists and scientific specialists supported by artists, architects, conservators, computer specialists, and photographers. A large number of student trainees, student assistants, and volunteers have also participated in various phases of the work. People from the town of Kavousi also helped us in many ways over the years. This publication would not have been possible without them. All these individuals are listed alphabetically below with their positions and dates.

Anthony Abutrab: architect and surveyor (1992); Connie Alanreddoch: student assistant (1991); Jason Aldred: student assistant (1998); Jane Allison: conservator (1989); Philip Ammerman: volunteer (1987–1988); John T. Ammons: soil scientist (1988–1991); Amanda Anders: student assistant (2001); Kristina L. Anderson: trench assistant (1990); Anna M. Andrews: student assistant (1996); Alden Arndt: computer specialist (1984–1985, 1988); John Arndt (1986, 1987); Kevin Baldwin: trench assistant (1987) and trench supervisor (1988); Richard Barden: conservator (1990); Juliana V. Barnea: artist (1996); Robert Barnes: student assistant (1998); Rene Beauchamp: computer specialist (1993); Jacqueline Beebe: trench assistant (1987); Lloyd Beebe: trench assistant (1987); Lisa V. Benson: registrar (1994); Katherine Bentz: student assistant (1991); Andrew Bieberich: assistant paleobotanist (1990); Duane Bingham: photographer (1984, 1987); Ann Blasingham: registrar (1988); Kenneth J. Bohac: trench assistant (1990); Tina Bolotis: artist (1996); Travis Boothby: student assistant (2000); Blythe Bowman: student assistant (1997); Andrew Bradbury: computer specialist (1992); Douglas Bradford: student assistant (1995); Lyla Pinch Brock: artist (1991–1998); Thomas M. Brogan: trench assistant (1987) and trench supervisor (1988); Christopher W. Bryan: student assistant (1993); Donna Bryant: trench assistant (1990); Sarah Bryant: trench assistant (1990); Ann Brysbaert: conservator (1995–1997); Nancy Buschini: conservator (1990); Jane B. Carter: trench supervisor (1990); Melinda L. Carter: trench assistant (1989); Xenia Chiloudaki: conservator (1987–1989); Stefania Chlouveraki: conservator (1994–2002); Janet Colbert: registrar (1987); William D.E. Coulson: co-director (1978–1999) and field director of Kastro (1987–1999); Matthew Crawford: conservator (1993); David Cummins: trench assistant (1992); Jennifer Dan: computer specialist (2000); Megen Dance: student assistant (2001); Martha R. Daura: conservator's assistant (1989); Barry Davis: student assistant (1998); Wesley Davis: student assistant (1991) and registrar (1993); Joseph Day: trench assistant (1984); Leslie P. Day: co-director (1978–2002) and field director of Vronda (1987–2002); Michael Decker: computer specialist (1998); Deanne Dicer (Toye): trench assistant (1989), trench supervisor (1990), and registrar (1992); Heidi Dierckx: lithics specialist (1992–2002); Roxana Docsan: artist (1994–2002); Quentin R. Dodd: student assistant (1993); Eve J. Dorman: student assistant (1993); Anne Ellenberger: trench assistant (1987); Bradley C. Engle: computer specialist (1996); Stuart Evans: trench assistant (1988) and trench supervisor (1989–1990); Teresa Faulkner: artist (1990); Gina Ferris: student assistant (1996); Elizabeth Fisher: trench supervisor (1987); Kimberley Flint-Hamilton: paleobotanist (1987–1989, 1992–2002); John Foss: soil scientist (1987–1988); Pedar Foss: trench assistant (1987) and trench supervisor (1988); Mark Gehl: student assistant (1997); Geraldine C. Gesell: co-director (1978–2002) and executive director (1987–2002); Kevin T. Glowacki: trench supervisor (1987–1992) and area specialist (1994–2002); Michael Goss: trench assistant (1989); Yvonne

Greenleaf: camp manager (1987); Amy Hackney: trench assistant (1990); Donald C. Haggis: trench supervisor (1987–1992) and area specialist (1993–1995); Charles Hall: architect (1988); Steven Hamilton: photographer (1989); Barbara Hamman: conservator (1988–1989); Roswell Edmond Hamrick III: architect (1991); Kiri Hanson: student assistant (2002); Richard Hebda: paleobotanist (1984); Carol Hershenson: registrar (1989–1990); James Higginbotham: trench supervisor (1988); Louise Hitchcock: trench supervisor (1989); Michael Hoff: architect (1987–1988); Katherine Holbrow: conservator (1992); Lyle T. Hubbard Jr.: trench assistant (1989); Darrin E. Humbard: student assistant (1992, 1994) and registrar (1995); Michael Inman: assistant paleobotanist (1989); Gerald W. Johnson: surveyor (1978); Shay L. Johnson: student assistant (1996); Robert A. Johnston: trench assistant (1988); Irini Karousas: conservator (1995–1998); Tassos Karousas: conservator (1995–1998); Shae Kelly: student assistant (2000); Helen Kingsley: conservator (1987–1988); Nancy L. Klein: trench supervisor (1989–1992) and area specialist (1993–2002); John P. Kline: trench assistant (1989); Walter Klippel: zooarchaeologist (1988–2002); Elizabeth Knudsen: assistant registrar (1990); Ralph Krisher: computer specialist (1990); Ingrid Lacy: assistant paleobotanist (1992); Linda L. Landry: conservator (1994); Elizabeth Langridge: trench supervisor (1990); Mark L. Lawall: trench assistant (1988) and trench supervisor (1989); Roberta Lawson: trench assistant (1988); Patti Lee: computer specialist (1995); John R. Lenz: trench supervisor (1988); Maria A. Liston: physical anthropologist (1987–2002); Susan B. Lucas: trench assistant (1988); Andrew Luckey: student assistant (1991); John McCarron: trench assistant (1989–1990); Jeremy McInerney: trench supervisor (1989–1990); Louise McInerney: computer specialist (1989); LaDelle Mackeban: trench assistant (1988); K. Wendy McLaughlin: trench assistant (1989); Michael McMillin: computer specialist (1997–1998); Catherine Magee: conservator (1993); Lisa Mahoney: student assistant (1991); Adrienne Malcolm: student assistant (2002–2004); Marina Markantonatos: trench supervisor (1987); George Martin: trench assistant (1988–1990); Shannon S. Meyer: trench assistant (1988); Andrew Mikelson: assistant architect (1990); Julie P. Miller: trench assistant (1989); Michele Miller: artist (1989); Heidi C. Mittelstadt: trench assistant (1988); Margaret S. Mook: trench assistant (1984), trench supervisor (1987–1992), and area specialist (1992–2002); Stephen T. Mooney: artist (1987–1988); Drew Moore: student assistant (1995); Michael Morris: soil scientist (1991); Karen Moukheiber: photographer (1988); J.D. Myers: student assistant (2001–2002); Marilisa Nelson: trench assistant (1989); Son Nguyen: student assistant (1993); Katherine Nightingale: conservator (1991); Albert Nyboer: conservator (1986–1987); Paulette Oppegard: trench assistant (1987); Caroline Paddock: assistant conservator (1991); Stavros Papamarinopoulos: geophysicist (1986–1988); Virginia Parks: trench assistant (1989); Neil Patel: student assistant (1993); Christina Paterakis: photographer (1990–1991); Judith A. Patterson: computer specialist (1994); Douglas H. Pierce: assistant architect (1989); Michael Pierce: trench assistant (1989); Melissa Pinsley: architect (1987); Faye C. Polillo: architect (1989–1990); J. Patrick Polley: camp manager (1994–1995); Joanne Polley: photographer (1994–1995); D. Sydnor Pugh: trench assistant (1990); Amy Raymond: trench assistant (1989); James Rehard: architect (1984); Jonathan Reynolds: trench assistant (1987–1988, 1990) and camp manager (1989); George Rochefort: trench assistant (1984, 1986) and camp manager (1988); Elizabeth Rodenbeck: artist (1995); Vanessa Rousseau: assistant architect (1990); Eric Rowland: architect (1989); Sylvia Ruud: artist (1981); Elizabeth Safran: artist (1985); Timothy Schultz: student assistant (1991); Scott Seay: camp manager (1990); Julia Shear: trench supervisor (1988);

Janusz Siewierski: trench assistant (1990); Noël Siver: conservator (1988–1995); David Skoog: trench supervisor (1990); Julie A. Smith: photographer (1996); Lynn Snyder: zooarchaeologist (1989–2002); Rajshree K. Solanki: student assistant (1996) and registrar (1997); Jeffrey S. Soles: trench supervisor (1987); Susan Springer: trench supervisor (1987); Katerina Stamoudi: trench supervisor (1990); Kirsten Svenson-Taylor: conservator (1992); Christine Thede: conservator (1994); Christopher Tillquist: trench assistant (1990); Michael E. Timpson: soil scientist (1987–1989); Jennifer Tobin: trench supervisor (1990) and area specialist (1991–2002); David L. Toye: trench supervisor (1989–1990) and camp manager (1992); Katerina Triantafylla: conservator (1991); Brian Tucker: student assistant (1998); Lee Ann Turner: trench supervisor (1988–1990) and area specialist (1991–2002); Markham Tyler: trench assistant (1988); Katherine Untch: conservator (1989); Anne Van Dyne: architect (1993); Benjamin Venable: trench assistant (1990); Sheilagh Wall: zooarchaeologist (1981–1984); Christina Watkins: student assistant (1993); Antoinette E. Way: trench assistant (1988); Vicki Weaver: trench assistant (1992); Charles Stanton Webster: student assistant (2002); Matt Weidenhammer: computer specialist (2002); Morris Weiss: trench supervisor (1987); Terry Weiss: trench assistant (1987); Gayle Wever: conservator (1984); Christopher White: student assistant (1995–1996) and assistant conservator (1997); Jerard White: student assistant (1998, 2001); Barry A. Williams: trench assistant (1990); Steven Williamson: trench assistant (1990); Christopher Wimberley: student assistant (1997) and registrar (1998); Nancy Wood: trench assistant (1987); Catherine Woolfit: trench supervisor (1989); Joshua Wright: trench assistant (1989); Claire Zimmerman: artist (1985); and John Zimmerman: photographer (1992–1993).

During the years of excavation, representatives of the Greek Archaeological Service worked at Kavousi, including Stavroula Apostolakou (1981), Marilena Kanetaki (1987, 1989), Angeliki Kossyva (1992), Kalliope Kotzageorgi (1987–1988), Kalliope Michaelidou (1988), Elpida Sklerou (1989), Chrysoula Sophianou (1990), Katerina Stamoudi (1989), and Metaxia Tsipopoulou (1983, 1984).

Many scholars and students participated in aspects of the work, sometimes repeatedly, for shorter periods of time. These included: David Day: surveyor; Peter Day: petrographer; Carole Gillis: ceramic specialist; Julie Hansen: paleobotanist; Effie Photos-Jones: metal analyst; James Raab-Rust: remote sensing; Oliver Rackham: paleobotanist; David Reese: shell specialist; Theodore Saupe: ceramicist; and Theodore Stamos: geophysical surveyor. Since the opening of the INSTAP Study Center for East Crete, the following staff members have also given of their time, energy, and expertise: Thomas Brogan, Stefania Chlouveraki, Douglas Faulmann, Kathy Hall, Eleanor Huffman, Chronis Papanikolopoulos, Katherine May, and Michel Roggenbucke.

Finally, several volunteers worked with the Kavousi staff for shorter periods, including the following: Betsy Anderson (1989), Donald W. Jones (1993, 1994), Betty Matthew (1987), Anita Musser (1989), Jeanette Sias (1985–2002), Richard Sias (1985–2002), Douglas Smith (1990), Helen Smith (1990), and Cindy Wood (1990).

The following people of Kavousi helped us over the years on site, in the *apotheke*, or in other capacities: Kalliope Athenaki, Kristalia Athanatou, Kalliope Chalkiadaki, Kostis Chalkiadakis, Irini Dandi, Athanasios Dandis, Manolis Dandis, Despina Daskalaki, Kalliope Daskaloyannaki, Manolis Daskaloyannakis, Maria Dermitzaki, Kostis Dermitzakis, Georgios Dermitzakis, Manolis Douloumis, Panayotis Douloumis, Kalliope Drakaki, Anna Geroyannaki, Georgios Giorgoulakis, Despoina

Grammatikaki, Kostoula Grammatikaki, Georgios Grammatikakis, Kostas Grammatikakis, Michalis Grammatikakis, Ioannis Kapetanakis, Manolis Kapetanakis, Nikolaos Kapetanakis, Michalis Kapsoritakis, Katina Kasotaki, Niki Kasotaki, Manolis Kasotakis, Athina Katsotaki, Stephanos Katsotakis, Kalliope Kazani, Vana Kokkinaki, Maria Kophinaki, Stratoula Kophinaki, Demetrios Kophinakis, Maria Koudouma, Kostis Koudoumoyiannakis, Markella Koukouraki, Sophia Lapokostandaki, Ioannis Lapokostandakis, Manolis Lionoudakis, Danae Maniadaki, Ioannis Maniadakis, Manolis Maniadakis, Michalis Maniadakis, Georgios Moutsakis, Georgios Nikoloudakis, Maria Nikoloudaki, Olympia Nikoloudaki, Manolis Nikoloudakis, Andonios Petrakis, Anthi Pervolaraki, Maria Pervolaraki, Nikolaos Pervolarakis, Vangelis Phiorakis, Ioannis Phiorakis, Ioannis Plakantonakis, Kostis Plakantonakis, Manolis Plakantonakis, Maritsa Ploutinaki, Ioannis Ploutinakis, Lakis Ploutinakis, Nikolaos Poulis, Nikolaos Remediakis, Andonios Saridakis, Aris Saridakis, Ioannis Saridakis, Michalis Saridakis, Nikolaos Saridakis, Angeliki Sekadaki, Eleni Sekadaki, Georgios Sekadakis, Michalis Sekadakis, Georgios Siphakis, Phanis Siphakis, Manolis Siganos, Stylianos Siganos, Athanasios Siritoudis, Evagelia Spiliaroti, Nikolaos Spiliarotis, Georgios Trachanas, Nektarios Trachanas, Panayotis Tsiolakakis, Michalis Tsombanakis, Manolis Tsombanakis, Evangelia Tzari, and Rodanthi Tzari. We are grateful to them and to all the people of Kavousi for their assistance.



# List of Abbreviations

The following chronological abbreviations are used (Final Neolithic and Bronze Age dates are based on Warren and Hankey 1989 and Nowicki 2003):

| | |
|---|---|
| FN | Final Neolithic (ca. 4000–3200 B.C.) |
| EM | Early Minoan (ca. 3200–2100 B.C.) |
| MM | Middle Minoan (ca. 2100–1600 B.C.) |
| LM | Late Minoan (ca. 1600–1100 B.C.) |
| SM | Subminoan (ca. 1100–1000 B.C.) |
| PG | Protogeometric (ca. 1000–900 B.C.) |
| G | Geometric (ca. 900–700 B.C.) |
| LG | Late Geometric (ca. 760–700 B.C.) |
| EO | Early Orientalizing (ca. 700–660 B.C.) |
| V | Venetian (12th–17th century A.D.) |
| Ott. | Ottoman (17th century–1900 A.D.) |
| Mod. | Modern (1900 A.D.–present A.D.) |

The following abbreviations are also used:

| | |
|---|---|
| AMSL | above mean sea level |
| cf. | comparable to (in faunal analyses) |
| cm | centimeter |
| cont. | continued |
| d. | diameter |
| dim. | dimension |
| E | east |
| est. | estimated |

| | |
|---|---|
| **F** | figurine |
| ext. | exterior |
| FM | Furumark motif (based on Furumark 1972) |
| FS | Furumark shape (based on Furumark 1972) |
| g | gram |
| h. | height |
| HM | Herakleion Museum number |
| IM | Ierapetra Museum number |
| int. | interior |
| kg | kilogram |
| L. | length |
| **M** | metal |
| m | meter |
| max. | maximum |
| mm | millimeter |
| MNI | minimum number of individuals |
| N | north |
| NE | northeast |
| NW | northwest |
| NISP | number of identified specimens |
| **P** | pottery |
| pers. comm. | personal communication |
| PMD | Peter M. Day |
| pres. | preserved |
| S | south |
| **S** | stone object |
| SE | southeast |
| **ST** | stone tool |
| SW | southwest |
| **TC** | terracotta |
| th. | thickness |
| W | west |
| w. | width |
| wt. | weight |



# Glossary

The text uses the following terms, which are specialized terminology or do not have exact English equivalents:

| | |
|---|---|
| *aloni* | threshing floor with stone-built border, usually round |
| *Aves* sp. | unspecified species of bird |
| *Bos* sp. | unspecified species of domestic cow or ox |
| *Canis familiaris* | domestic dog |
| *Capra aegagrus* | agrimi, Cretan wild goat |
| *Capra hircus* | domestic goat |
| dint | thumb impression on pottery, generally at the attachment of handle or leg |
| *Equus* sp. | unspecified species of horse, donkey, or mule |
| lekane | basin |
| *Lepus/Oryctolagus* | hare or rabbit |
| *Meles meles* | badger |
| *metochi* | rural hamlet or field house |
| nodulus | a small lump of clay with one or two seal impressions but without any means of attachment to another object |