FRIENDS OF GORDION

NEWSLETTER

Figure 1: Conservation of the Early Phrygian Citadel Gate. Photo by Gebhard Bieg.

This was the third year of a renewed campaign of excavation focused primarily on Gordion's city plan and fortification systems of Early, Middle, and Late Phrygian date (9th–4th c. B.C.), although the majority of our activities again focused on architectural conservation, especially the Early Phrygian Gate, the Terrace Building, and the 9th c. B.C. pebble mosaic. This newsletter provides us with the opportunity to share with you our most recent discoveries and accomplishments in gratitude for your support, and we look forward to showing them to you in person at Gordion. As was the case last year, we worked in more than 10 different sectors of the site, and there were nearly 40 scholars and scientists who were members of the team at various points in June, July, and the first half of August.

Architectural Conservation and Restoration

As in 2013 and 2014, the primary focus of our architectural conservation activities this year was the **Early Phrygian Gate**, which is the best-preserved citadel gate in Iron Age Asia Minor (figs. 1-3). A significant bulge developed in the masonry following a major earth-

quake in 1999, and we formulated a five-year strategic plan for conserving the stones and stabilizing the building. With generous support provided by the J. M. Kaplan Fund, the Selz Foundation, and the Merops Foundation, we had the resources to acquire and erect a new scaffolding system for the gate, supplied by Tamer Kalıp ve İskele Sistemleri in Ankara. Above it we placed an aluminium gantry crane capable of lifting 1500 kilos, designed by our engineer David Biggs, of Biggs Consulting Engineering PLLC, and produced by the German firm of Schilling Gerätebau (figs. 1, 2). This gave us the capability of removing the damaged or displaced stones from the Gate and moving them to the scaffolding where they were conserved (fig. 3).

All of the masonry surrounding the damaged area was first consolidated by inserting chinking stones in the open joints and filling voids with lime mortar and grout. Fractured blocks at the northeast corner of the Gate were then consolidated in place with micro-injections and the insertion of stainless-steel bars.

In order to remove the damaged stones, we first had to lift the concrete cap that had been set in place above the Gate's South Court in 1988. Such caps were common in architectural conservation several decades ago, but they routinely crack in the course of each winter and summer, so that moisture enters the masonry and weakens its stability. Once the cap had been lifted, we used the gantry crane to remove the facing stones in the area of the bulge. Sixteen such blocks were lifted, all of which have been documented and conserved with epoxy and the insertion of stainless-steel bars. The extent of the earthquake damage was immediately apparent once we began to remove the

Figure 2: Lifting of the damaged blocks of the Early Phrygian Citadel Gate. Photo by Gebhard Bieg.

Figure 3: Conservation of the blocks from the Early Phrygian Citadel Gate. Photo by Brian Rose.

Figure 4: The wall separating rooms 5 and 6 of the Early Phrygian Terrace Building, prior to conservation. Photo by Gebhard Bieg.
Figure 5: The wall separating rooms 5 and 6 of the Early Phrygian Terrace Building, at the end of conservation. Photo by Gebhard Bieg.

stones, which highlighted the urgency of our project.

The conservation of the Early Phrygian **Terrace Building**, an eight room industrial complex with a length of over 100 m, has continued since 2009, with our primary attention devoted to the masonry foundations that were badly damaged in a major conflagration of ca. 800 B.C. Our focus in 2015 was the conservation of the wall dividing the fifth and sixth rooms of the complex (figs. 4, 5), which included epoxy repair of fractured blocks, rebuilding the walls with the newly conserved blocks, and the insertion of stainless-steel bars to reinforce the conserved stones. Very little new stone replacement was needed for the reconstruction, and we inserted chinking stones into the open joints of the reconstructed masonry portion, thereby following Early Phrygian building practice.

The strategies used for all architectural conservation at Gordion were first developed by Frank Matero of Penn's Historic Preservation program. Elisa del Bono and Angelo Lanza served as field directors, and were assisted by Giuseppe Bomba and Renzo Durante, while the engineering components of the project were overseen by David Biggs and Semih Gönen. A critically important role was played by archaeobotanist Naomi Miller, who helped develop the "soft capping" technique of using shallow-rooted plants as the cover of conserved walls.

Pebble Mosaic

One of the treasures of the Gordion Museum is the multi-colored pebble mosaic from one of the elite Early Phrygian buildings, Megaron 2 (figs. 6-8). Dating to the second half of the ninth century B.C., it ranks as the oldest colored stone mosaic ever discovered, which is why we have devoted several seasons to its conservation. One of the panels will be traveling to the Penn Museum for the Gordion exhibit that opens in February, and that received the majority of our conservators' attention this summer. The work was directed by Cricket Harbeck and Jessica Johnson, and assisted by William Shelley, Eda Kaygusuz, and Pshtiwan Ahmed Ibrahim, our conservation Intern from the Iraqi Institute for the Conservation of Antiquities and Heritage in Erbil, Iraq.

In 2013 and 2014 the panel had been safely removed from the exhibit at the Gordion Museum, flipped upside down, and the heavy concrete on the reverse (applied in the 1960s) was trimmed down. When the original concrete was set in place, some of it had spread onto the surface, thereby obscuring the original design. At the beginning of the 2015 season the panel was flipped back and the concrete overgrout was removed from the surface of the original pebbles while ensuring that they were carefully anchored in place.

New pebbles of white, red, and black were collected in the Porsuk valley from the same sources that had supplied the original pebbles, which are located only a few kilometers from Gordion. These were used to fill in the missing sections of the mosaic and render the design more intelligible to viewers, and you can see the successful results of this treatment in fig. 7. The replacement stones were painted with shellac which will glow orange in ultraviolet light, thereby allowing restored areas to be easily distinguished from the original. A packing support structure was constructed by Richard Liebhart to ensure that the heavy mosaic panel can be properly protected and supported during crating and shipping to the Penn Museum.

Figure 6: The pebble mosaic before conservation. Photo by Gordion Archaeological Project.
Figure 7: The pebble mosaic after conservation. Photo by Gebhard Bieg.

Excavation

Some of our most exciting discoveries this year were made on the southern side of the mound (Area 1), where excavations in 2013 and 2014 revealed a network of Phrygian walls which demonstrated that the western side of the citadel was fortified, and that those fortifications had already been established in the Early Phrygian period (9th c. B.C.), neither of which had been known previously (fig. 9).

In 2014 we had discovered a bend in the main fortification wall as it approached the Lower Town, and its orientation appeared to match that of a street uncovered by remote sensing that led toward the large Middle Phrygian fort of Küçük Höyük. In other words, it looked as if we had uncovered the western side of the street that led from the Lower Town into the citadel, and we assumed that a monumental gate remained to be discovered there. This area was therefore, once again, the focus of our excavations in 2015, and the new extension of the trench brought its dimensions to 35 x 20 m.

In the course of the season, we discovered a network of entrances, fortification walls, and bastions that span a period from the 9th to the 4th century B.C., and the complex building history can most easily be grasped by consulting the plan in fig. 10, which separates the building phases by color. Construction appears to have begun in the Early Phrygian period (9th century B.C.), at approximately the same time in which the monumental gate was being built on the citadel's southeast side (figs. 1, 2). A large glacis or stepped terrace wall over 2.5 m in height supported a substantial fortification wall nearly 3 m. wide (no. 1 in fig. 10: green). We revealed 13 steps of the glacis, although it

Figure 8: The pebble mosaic during conservation. Conservator Jessie Johnson explains her strategy to Julian Siggers, Amanda Mitchell-Boyask, Charles Williams, and Dan Rahimi. She is being assisted by Eda Kaygusuz. Photo by Brian Rose.

Figure 9: View of the Area 1 trench on the southern side of the Citadel Mound. Photo by Lucas Stephens and Gebhard Bieg.

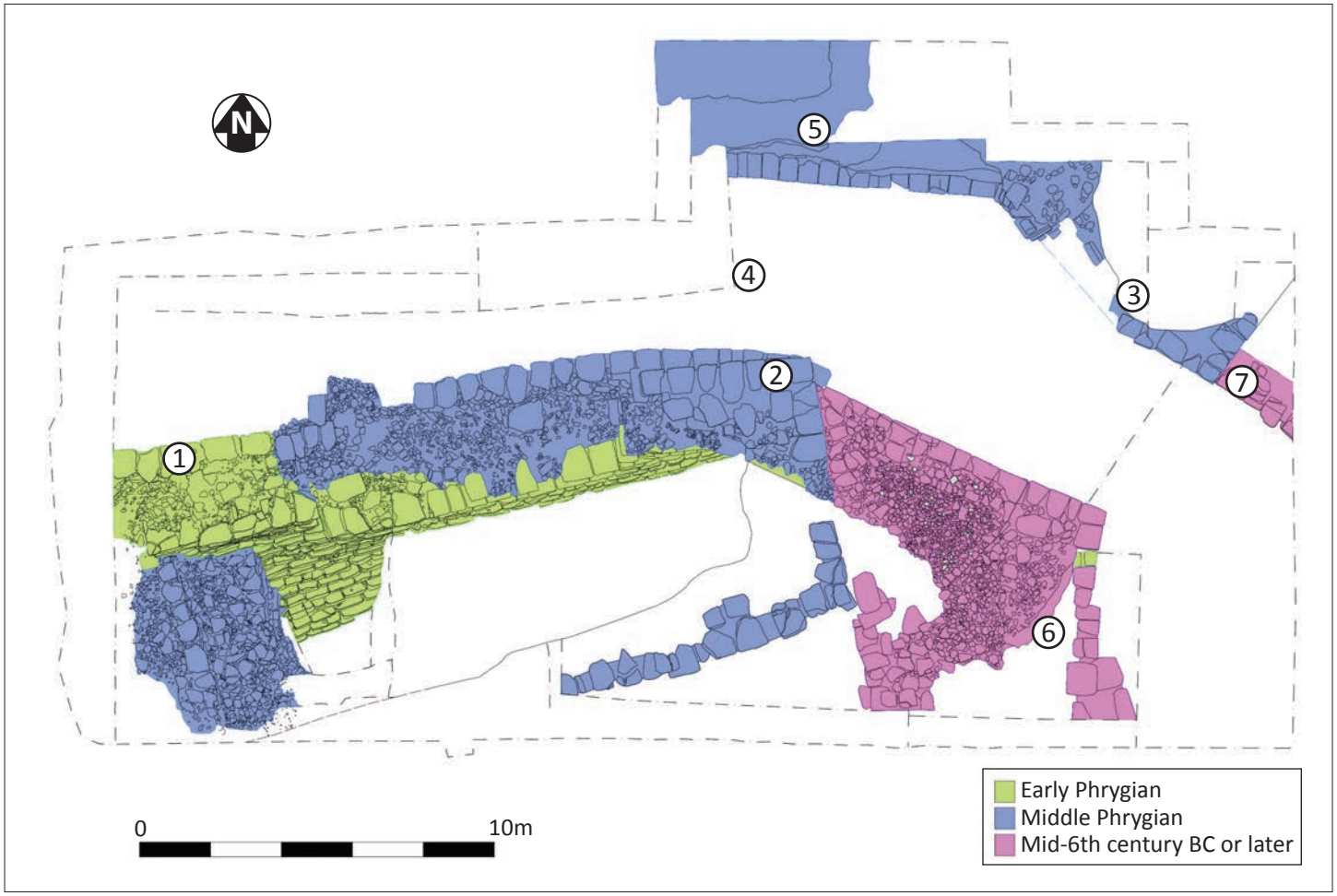

Figure 10: Color phase plan of the Early, Middle, and Late Phrygian construction in Area 1.
Plan by Sarah Leppard, Simon Greenslade, and David Bescoby.

probably continued down around 3-4 m more, which means that the glacis and the wall it supported probably rose to a height of over 10 m.

After the fire of ca. 800 B.C., the Early Phrygian wall was used as the support for a new Middle Phrygian fortification wall, probably constructed in the early 8th c. B.C. The citadel area under protection on this side was extended outward, toward the south, for a distance of nearly 6 m. In the course of enlarging the area, stone rubble was deposited in front of the Early Phrygian glacis, and it effectively disappeared from view until we uncovered it over 2800 years later (figs. 9-12). A new bastion with a thickness of 8 m was constructed on the west side of the road leading into the citadel (no. 2 in fig. 10: blue) and a complementary bastion also 8 m thick was discovered at the east (no. 3 in fig. 10: blue). We were delighted to discover that the eastern bastion lies parallel to the Middle Phrygian glacis discovered further to the northeast in the 1950s, and we hope to link the two areas by excavation next year.

The two bastions create a fan-shape entrance to a road that moves toward the west, behind the western bastion (no. 4 in fig 10), which has a width of nearly 5 m (fig. 12). Whether the road subsequently turns north into the citadel is still uncertain, but a northern extension of the trench next year should provide the answer.

The southern side of the road features enormous polychromatic stones that are often over .60 m in height and over 1.30 m long. The northern side of the road was also discovered this year (no. 5 in fig. 10: blue), and features a line of carefully cut ashlar blocks, the upper section of which had collapsed in front of it (fig. 13). Here too, judging by the collapsed blocks, we are

dealing with a polychromatic wall, of which at least 15% featured a bright red color. The red stones must have been transported from the quarry in a very rough form and finished on-site, with the trimmed waste of the stones used as rubble packing behind the wall, as one can see in fig. 13. This wall must have held back the enormous weight of the citadel, which means that it would originally have risen over 3 m higher, and it is not surprising that it ultimately collapsed.

The fortifications were not strong enough to prevent a successful Persian attack in the 540s, although we have not found the massive numbers of Persian arrowheads in the fills around the walls, as Rodney Young did in the fort of Küçük Höyük. After the Persians assumed control of Gordion, the outer fortifications became non-functional because a Persian siege mound next to the Küçük Höyük fort remained in place. This meant that the fortifications along the borders of the citadel, such as this one, acquired an even more strategic significance.

During this period (ca. 540-400 B.C.), a new bastion (no. 6 in fig. 10: pink) was added next to the western one, which went out of use. We have only uncovered a part of this bastion, but it looks as if it too may have been 8 m thick, and it would have further narrowed the entrance to the road. Within the foundations of the bastion we discovered a group of fragmentary painted architectural terracottas that date to the middle of the sixth century, along with an enormous mudbrick collapse that clearly constituted the upper walls of the bastion (fig. 11). Directly opposite it there was additional construction that either extended or replaced the old Middle Phrygian bastion (no. 7 in fig. 10: pink). Built into the construction were reused semicircular column bases that had been taken from the Mosaic Building directly above it on the citadel. Much of the complex appears to have been destroyed in an early 4th century earthquake, although some walls continued to stand into the Hellenistic and Roman periods.

Figure 11: View of Area 1, looking west. The collapsed mudbrick is visible in the center. Photo by Gebhard Bieg.

Figure 12: Area 1, looking west, showing the entrance to the citadel street. Photo by Brian Rose.

As we mentioned above, the existence of a road extending from a southern gate and cutting through the center of the citadel has long been assumed, but there is actually very little evidence to support it; and if it did exist, what lay adjacent to it on the western side of the citadel during the Ear-

ly and Middle Phrygian periods? These are the questions we hope to answer with a trench situated in the center of the mound (Area 4), immediately to the west of the Terrace Building complex that was uncovered by Rodney Young in the 1950s (fig. 14). This area is not an easy one in which to excavate, since Early Phrygian levels lie approximately 8 m below the surface, and the trench had to be large enough so that a team of workmen could remove a large amount of earth at such a great depth.

We began a 20 x 10 m trench this summer under the direction of Catalin Pavel, with assistance provided by Penn AAMW graduate student Janelle Sadarananda, and by Selen Soysal and Işık Abacı. Given the large size of the trench, we were only able to reach Roman levels, and the completion of work here will probably require two more seasons (figs. 14, 15).

The earliest level that we uncovered dated to the beginning of the second century A.D. and featured a circular oven 1.40 m in diameter that yielded numerous burnt horn fragments; four more horn fragments were found in an ashy pit in front of it, and a marble statuette of Asclepius found at a higher level also probably dates to this period.

The most important material, however, was Medieval, which is a period about which relatively little is known at Gordion. Five medieval occupation phases of this period were encountered, spanning the 13th and the early 14th c. The main activity here was storage, with forty-eight pits in total spread across an open area, many of which were covered with a lime plaster and repeatedly replastered. Pig bones were found in up to a dozen contexts, suggesting that this was a Christian settlement operating during the Seljuk period.

Figure 13: The Middle Phrygian wall bordering the street in Area 1, measured by Eda Kaygusuz and Hüseyin Erol. Photo by Gebhard Bieg.

A few of the pits were bell-shaped and likely used for grains, the largest having a capacity of up to 350 kg. We uncovered evidence here for the early diffusion of rice, and there were also fish bones indicative of long-distance trade. An unexpected discovery was the presence of camel bones in the pits, which is the first evidence we have found of their presence in Medieval Gordion (fig. 16). Some of the camel bones bore traces of butchery, and we found two camel skulls, one of which was adorned with an object that featured the large teeth of a cat, probably a lion or tiger. Several of the associated ceramics were of high quality, including a perfume flask and pottery with sgrafitto and champlevé decoration. Two fragmentary ovens of Seljuk date were also unearthed, although they were clearly not as substantial as the many medieval ovens discovered east of our trench during the Young excavations. It is noteworthy that the extensive food production facilities that characterized this area during the Early and Middle Phrygian periods appear to have continued during the Seljuk period, even though the latter settlement was considerably smaller.

We should add a postscript to the discussion of the 2014 sondage in the Terrace Building (Area 2) in last year's newsletter. The earliest features that we uncovered, 4.5–5.5 m below the floor of the Terrace Building, were a ruined building and a large kiln, at least 2.5 m in diameter. We tentatively assigned an Early Iron Age date to it (ca. 11th c. B.C.) at that time, but systematic analysis of the associated ceramics coupled with new radiocarbon tests now point to a construction date for both features in the Early Bronze Age. Very little material from such an early date has been discovered on the citadel, and the evidence yielded by the sondage, small though it is, provides a welcome addition to the corpus of evidence for habitation on the Citadel Mound during the late third millennium B.C.

Figure 14: The Area 4 trench, looking northeast. Photo by Lucas Stephens and Gebhard Bieg.

Geophysical Investigations

Since 2007 we have devoted considerable attention to a reconstruction of Gordion's city plan during the Early, Middle, and Late Phrygian periods. Our intention, in particular, has been to identify the network of ancient roads as a way of understanding the physical links among the administrative, industrial, and residential districts. To accomplish this we have made extensive use of remote sensing, which allows us to detect subsurface features such as walls and streets without the need of excavation. Although we employ a number of remote sensing techniques, two of them have been especially successful for us: magnetic prospection, which detects magnetic anomalies (such as mudbrick or stone) up to a depth of nearly 3 m, and electrical resistivity, which quantifies a buried object's resistance to electric currents, and allows us to detect features as deep as 8 m.

All geophysical prospection in 2015, both magnetometry and electric resistivity, was conducted by Stefan Giese and Christian Hübner of GGH in Freiburg, Germany, who have been overseeing Gordion's remote sensing program since 2007. By the end of the 2014 season, we had been able to determine that each of Gordion's two residential districts, the "Lower" and "Outer" Towns, was surrounded by a defensive ditch, 3.5 m in width, with a fortification wall on its interior (fig. 17). The residential districts were approximately the same size, 44–45 hectares (109–111 acres), and therefore unusually large by comparison to the Citadel Mound itself, which was 13 hectares (32 acres).

Although we were able to reconstruct completely the circuit of the Lower Town, which lay due north and south of the Citadel Mound, the borders of the Outer Town were still uncertain, and that constituted the pri-

Area 4 plan

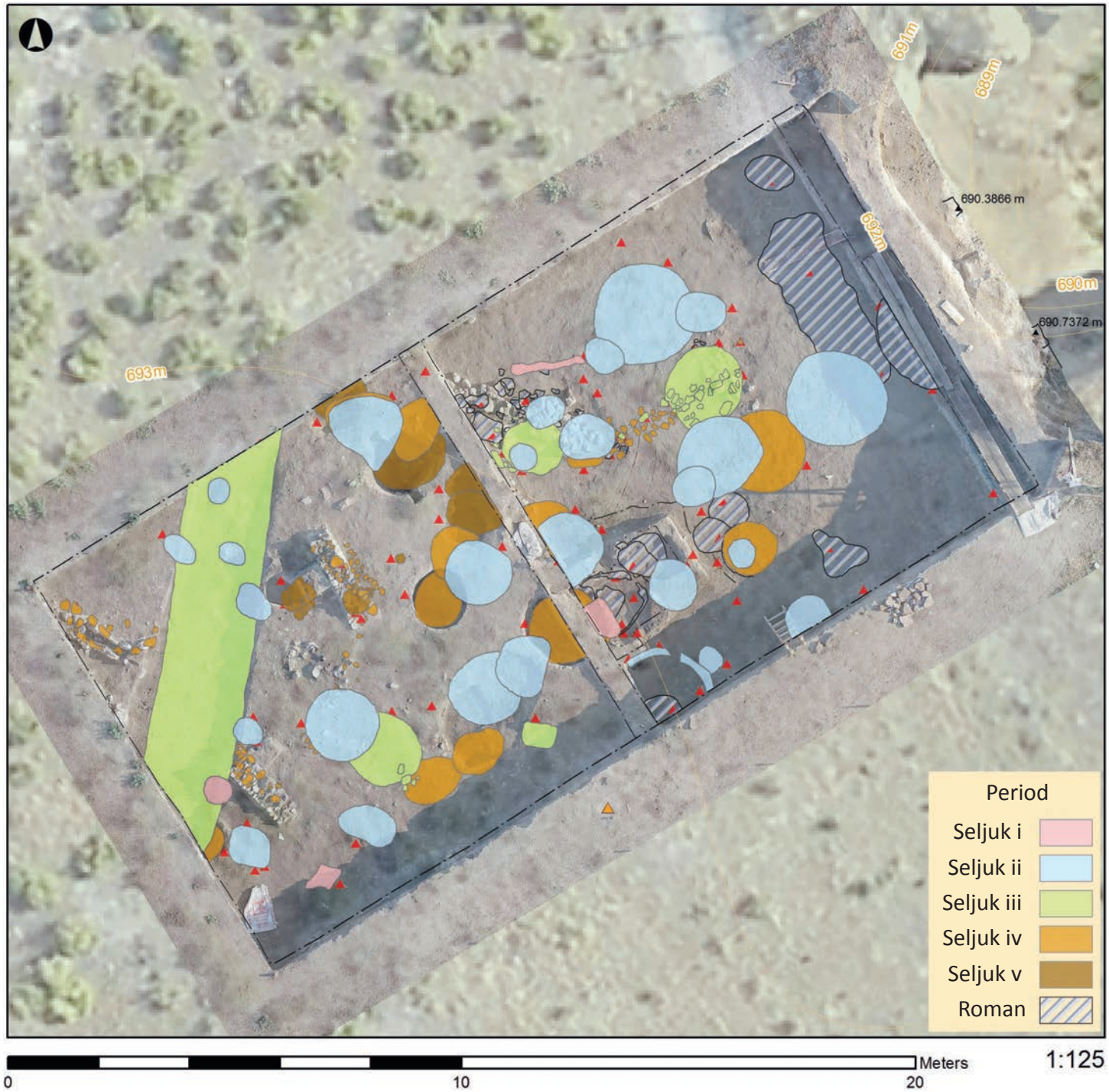

Figure 15: Color phase plan of the Seljuk-period pits in Area 4. Plan by David Bescoby.

mary focus of our investigations this year. By using a combination of magnetic prospection and electrical resistivity, we were able to reveal the outlines of what we assume was a monumental mudbrick fort at the western edge of the Outer Town (fig. 17, left). The fort measures at least 100 x 70 m, and within this area, still visible on the surface, was a line of ashlar blocks of Middle Phrygian date that probably formed part of it. We also detected the fortification ditch on the southern side of the Outer Town, and even though we will need one more year to deter-

mine the southeast border of this district, its size and configuration are now relatively clear.

Resistivity was also used productively on the Citadel Mound, to the east of the Terrace Building. It is now clear that nearly all of the terrace was created by depositing 4 m of stone fill as a foundation, thereby confirming the results of last year's sondage in that area, and it highlights the massive extent of the Phrygian building campaign in the 9th century B.C.

Figure 16: Excavation of the camel bones in Area 4, with Selen Soysal, Janine van Noorden, and Catalin Pavel. Photo by Gebhard Bieg.

Gordion Exhibit: The Golden Age of King Midas

As we mentioned at the beginning of this newsletter, much of the 2015 season was spent preparing for an exhibit on Gordion and its neighbors that will open at the Penn Museum in February of 2016. Entitled "The Golden Age of King Midas," this exhibit will feature over 120 objects loaned from four museums in Turkey: the Museum of Anatolian Civilizations in Ankara; the Gordion site museum, the Istanbul Archaeological Museum, and the Antalya Archaeological Museum. The focus of the exhibit will be Tumulus MM (the "Midas Mound", ca. 740 B.C.), one of the largest burial mounds in Turkey (53 m high), which was excavated by Penn in 1957. Within it is the oldest standing wooden building in the world (fig. 18), and it contained the complete assemblage of gifts that was deposited there during the funeral of a man whom we assume was Midas' father. Much of this material will travel to Penn for the exhibit, as will one of the panels from the pebble mosaic (fig. 7). Visitors will also see a number of objects from a group of Lydian tombs, now in Istanbul, dating to the late 6th/early 5th centuries B.C., and several silver artifacts from a burial mound in Lycia (the "Bayındır Tumulus D", ca. 700 B.C.). One of the highlights of the exhibit will be an ivory lion tamer figurine on loan from the Delphi Archaeological Museum (fig. 19), which probably formed part of a throne dedicated by Midas to Apollo in the late eighth century B.C.

The exhibit will give us an opportunity to highlight the other great Near Eastern kingdoms and states with which the Phrygians interacted during the Iron Age and Archaic periods (ca. 950-540 B.C.), such as Assyria, Urartu, the Neo-Hittite city-states of North Syria, Persia, Lydia, and Greece, among others. These areas will also form part of the exhibit's narrative, and will enable us to bring together a disparate group of rarely seen treasures from our own collection, including a 9th c. B.C. Assyrian relief and a large burial shroud with gold appliqués from the south Russian site of Maikop. This ten-month exhibit will open on February 13, 2016, and we are indebted to the Turkish Ministry of Culture and Tourism and the Greek Ministry of Culture for their generosity in loaning these objects.

Gordion Cultural Heritage Education Program

The Gordion staff is in residence at the site for only two months each year, which means that we need to rely heavily on the local community to protect and promote the surviving ancient remains. Gordion's Deputy Director, Ayşe Gürsan-Salzmann, has therefore pioneered a new program to educate the children of the region in cultural heritage protection. These kinds of local community outreach programs were typically neglected by archaeological teams in earlier days, but we now need to incorporate them into our strategic plans to ensure that our programs to preserve the past will survive well into the future.

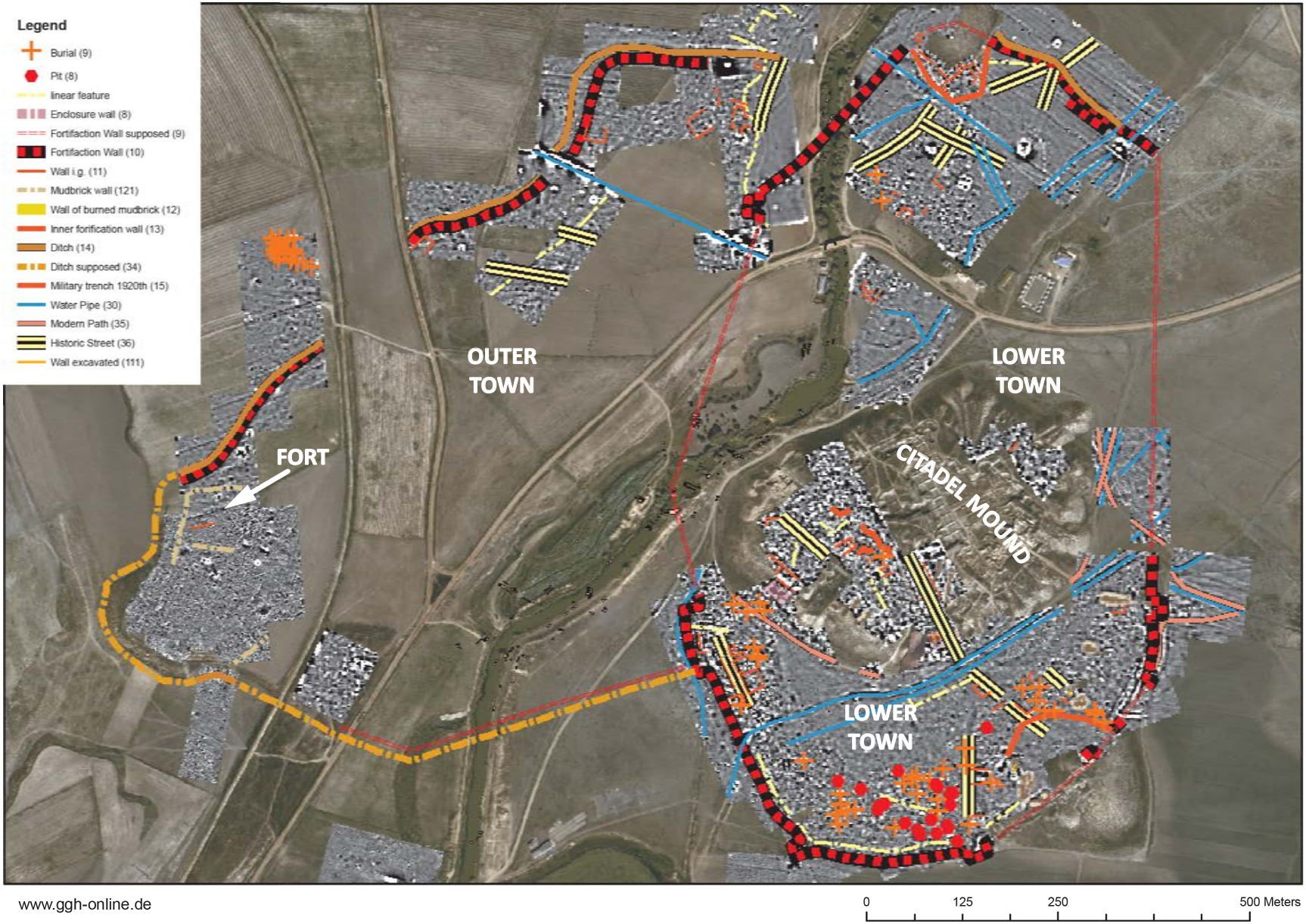

Figure 17: The fortifications of Gordion detected through remote sensing. The new results in the Outer Town appear at left. Plan by GGH.

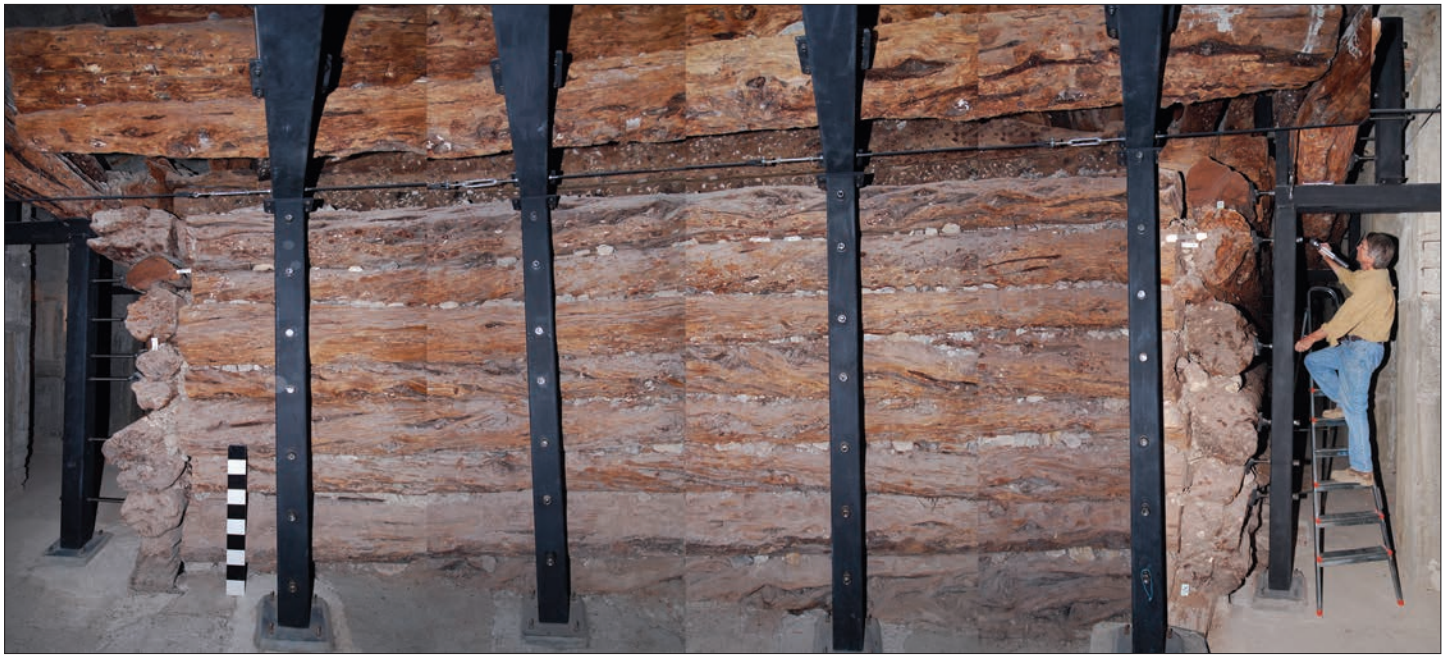

Figure 18: The wooden tomb chamber in Tumulus MM, 740 B.C. Photo by Richard Liebhart.

This was the second year of the program, which included eight local high school students from two villages near Gordion. It was again directed by Ayşe Gürsan-Salzmann and Halil Demirdelen, Deputy Director of the Ankara Museum, who were assisted by the Penn Museum's Naomi Miller, Penn graduate student Janelle Sadarananda, and Özlem Mehder, a forensic anthropology student at Ankara University (fig. 20).

The goal of the program was to inform local high school students and their families about the history of Gordion and its environment. Cultural heritage training is intended to inspire them to value their heritage in general, and to build sensitivity to site preservation at Gordion in particular. Among other activities, the program included an intensive tour of Gordion's Citadel Mound, during which preservation techniques were discussed at the top of the 10 m high scaffolding at the Citadel Gate. There were also site visits to Kaman-Kalehöyük, Juliopolis, and Boğazkale, after which the students delivered reports on the rich diversity of the cultural legacy of the Anatolian plateau where their own ancestors had made their home.

Publication, Staffing, and Notable Visitors

We benefited tremendously this year from the periodic visits of Enver Sağır, Halil Demirdelen, and Emel Yurtagül, the Director and Deputy Directors, respectively, of the Museum of Anatolian Civilizations in Ankara; from Melik Ayaz, Head of Excavations and Research for the Ministry of Culture and Tourism; and from a delegation from the Penn Museum: Williams Director Julian Siggers; Charles Williams, the former Director of the Corinth Excavations and a Penn Museum overseer; Dan Rahimi, the Penn Museum's Executive Director of Galleries, and Amanda Mitchell-Boyask, the Penn Museum's Director of Development (fig. 8). We were fortunate in hosting for two weeks the family of Penn Museum overseer Peter C. Ferry, including his wife, Lily, and children, Oliver and Lucy. All of them became indispensable members of the staff.

Our work during the 2015 season was made easier due to the energetic support of our representative, Ms. Melek Yıldızturan of the Ankara Museum of Anatolian Civilizations, with whom we had the pleasure of working for the second year in a row. Her colleagues Mustafa Metin and Mehmet Akalın also provided invaluable assistance during the course of the season. We also extend warm thanks to the General Directorate for Cultural Heritage and Museums, especially Mr. Abdullah Kocapınar, General Director, Mr. Melik Ayaz, Head of Excavations and Survey, Mr. Mustafa Bozdemir, Mr. Gökhan Bozkurtlar, Mr. Umut Görgülü, and Ms. Nilüfer Ertan. A very important role was played

Figure 19: Ivory lion tamer in the Delphi Archaeological Museum, ca. 700 B.C. This probably belonged to the throne of Midas, and will be part of the Gordion exhibit at the Penn Museum in 2016. After R. Colonia, The Archaeological Museum of Delphi (2006), p. 30.

Figure 20: The Cultural Heritage Education program at Yazılıkaya, led by Ayşe Gürsan-Salzmann and Halil Demirdelen. Photo by Gebhard Bieg.

by Ahmet Kadıoğlu of Surkon, whose company showed our workmen how to assemble and operate the gantry crane on the Citadel Gate scaffolding. Equally generous in their support were the Kaymakam and Belediye Başkanı of Polatlı, Mr. Mahmut Nedim Tunçer and Mr. Mürsel Yıldızkaya, respectively. Mr. Hasan Cemal Eraslan, Polatlı Belediye Başkanı Yardımcısı, visited the site several times to discuss the planning of an Archaeopark in the area of Gordion. The new program is intended to protect the monuments of the region; to make the residents stakeholders in the protection of the region's cultural heritage; and to educate the local community about the archaeology of the region. This complements beautifully the cultural heritage education program for children discussed above.

The excavation house was filled with researchers working on a wide variety of manuscripts that spanned a period from the Bronze Age through the Hellenistic period (fig. 21). These included Askold Ivantchik and Lada Sementchenko on the Persian arrowheads from Küçük Höyük; Gareth Darbyshire on the iron objects; Carolyn Aslan on the late Bronze Age and Early Iron Age ceramics; Kathleen Lynch, assisted by Sarah Beal, on Greek ceramics; Beth Dusinberre on the cremation burials; Gül Gürtekin Demir on the Lydian ceramics; Caitlin Clerkin and Andrea Berlin on Hellenistic ceramics; Scott Redford on Seljuk-period ceramics; Susanne Berndt on the frescoes from the Painted House;

Jane Hickman on Phrygian jewellery; Ömür Harmanşah, on Early Phrygian orthostats; Richard Liebhart on the architecture of Tumulus MM; and Penn graduate students Sam Holzman (textiles and tortoise shell lyres); Kate Morgan (Phrygian textile production); Peter Cobb (Phrygian ceramics); and Lucas Stephens, who used aerial photogrammetry to produce a digital, 3-D map of the landscape around Gordion. Two more monographs are scheduled to be published next year: Phoebe Sheftel on the bone and ivory objects, and John (Mac) Marston on Gordion's ancient environment.

We want to single out several members of the staff without whom this summer's work could not have functioned as well as it did: Iris Fernandez (ISAW/NYU), registrar, assisted by Ken Jordan; Gebhard Bieg, photographer; Emily Miller and Cem Küncü (Ankara University), illustrators; Joseph Nigro (NASA) and David Bescoby, surveying and mapping; Janine van Noorden (Groeningen University), faunal analysis; Naomi Miller (Penn) and Lucas Proctor (University of Connecticut), archaeobotany; Cem Küncü (Ankara University), ceramic analysis; Tuğba Gencer (Bilkent University), physical anthropology; Stefan Giese and Christian Hübner (GGH), geophysics; and Gareth Darbyshire (Penn), archivist. Assisting in virtually every aspect of the excavation were Penn undergraduates Braden Cordivari and Emma McNamara.

The architectural conservation was overseen by Elisa del Bono, assisted by Angelo Lanza, Giuseppe Bomba, and Renzo Durante. Engineering expertise, especially regarding the conservation of the Early Phrygian Gate, was provided by Semih Gönen and David Biggs. The object conservation work was expertly overseen by Jessica Johnson (Smithsonian Institution) and Cricket Harbeck, with interns William Shelley (UCLA/Getty), Eda Kaygusuz (Marmara University), and Pshtiwan Ahmed Ibrahim, (Iraqi Institute for the Conservation of Antiquities and Heritage, Erbil). Pshtiwan was the second of our interns from the Iraqi Institute, and we look forward to many more in the future.

The excavation of the Phrygian fortification walls (Area 1) was directed by Sarah Leppard and Simon Greenslade, assisted by Hüseyin Erol (Hacettepe University), and occasionally by Eda Kaygusuz (Istanbul University), Braden Cordivari (Penn), and Emma McNamara (Penn). The trench west of the Terrace Building was supervised by Catalin Pavel, assisted by Selen Soysal (Ankara University), Işık Abacı (Istanbul University), and Penn graduate student Janelle Sadarananda. Ken Jordan provided indispensable support re-

Figure 21: The 2015 Gordion Project staff. Photo by Gebhard Bieg.

garding the organization of the pottery depot, and Zekeriya Utğu, our house manager and guard, kept everything running efficiently.

We would like to close by noting again that none of our accomplishments this summer would have been possible without your encouragement and generous support. It is a pleasure to acknowledge, in particular, the assistance offered to us by the University of Pennsylvania Museum of Archaeology and Anthropology, the C.K. Williams II Foundation, the Selz Foundation, the Loeb Classical Library Foundation, the Luther Replogle Foundation, the Merops Foundation, and the J.M. Kaplan Fund. Especially at this particular time, when the cultural heritage of Syria and Iraq is disappearing so rapidly, we're grateful for the investment that you have made in the preservation of the past.

We hope to be able to share our results with more of you during this year: in lectures in the U.S., at Gordion itself, and at the Penn Museum's Gordion exhibit. You'll find the latest information about the project on our website:

http://sites.museum.upenn.edu/gordion

Thank you again, and we look forward to welcoming you to the site!

With best wishes,

C. Brian Rose
James B. Pritchard Professor of Archaeology, University of Pennsylvania; Director, Gordion Archaeological Project

Ayşe Gürsan-Salzmann
Assistant Director, Gordion Archaeological Project, Penn Museum

The Friends of Gordion support the ongoing activities of the Gordion Excavation Project, which include site conservation, fieldwork, and publications of the latest discoveries. All Friends of Gordion receive the annual newsletter that provides information about the results of the season's work. Friends are especially welcome at Gordion and are given guided tours of the site, the excavation, and the museum. Every contribution, no matter how small, enables us to further the cause of protecting and publicizing the site. You can support Gordion by making your tax deductible donation at *http://sites.museum.upenn.edu/gordion/about-us/friends-of-gordion*