

# dig™

INTO HISTORY

When Olives  
Were Money  
Pg 54

Vandals on  
the Attack  
Pg 24



# Roman Africa



**EAGLE EYE**



We have hidden 4 eyes like the one above in this month's DIG issue (print and digital edition). See how fast you can find each—but, while you are looking, check out the articles in this issue.

And, don't take a peek at the answers on page 41 until you have found all four eagle eyes!

# FEATURES

## 2 The Stage Is Set

by Anthony Hollingsworth

## 5 Africa Proconsularis

by Richard A. Lobban

## 8 Olive 'Money'

by Jackson Kuhl

## 10 An Emperor's Prize

by Elizabeth Fraccaro

## 12 Next Stop—Numidia

by Nell Wright

## 17 The Golden Ass

by Liz Johnson

## 18 North Africa's Silphium

by Jennifer P. Baker

## 22 Let's Visit El Djem

by Anthony Hollingsworth

## 24 The Baths at Leptis Magna

by Sarah Dawson

## 28 A Royal City

by Angela Murock Hussein

## 30 Trouble from the North

by Sarah Novak

## 33 The Christian Connection

by Anthony Hollingsworth

## DEPARTMENTS

- 1 Map: Roman World at Its Height
- 20 Fun With Words
- 27 The Calliope Chronicles
- 35 Fast Forward—Mussolini's Vision for Africa
- 36 Interestingly... Journey of an Obelisk
- 37 What's Wrong Here?
- 38 Ask Away!
- 40 This & That
- 41 Off the Shelf/On the Net

## LET'S GO dig-GING

- 43 Looking into the Past
- 44 Let Me Introduce You...  
by James B. Heidel
- 48 Tombs of the First Settlers  
by James B. Heidel
- 52 Let's Take a Look  
by James B. Heidel
- 54 The Adventures of Dr. Dig
- 55 In the Headlines 'Seeing' the Past  
by Damian Evans
- 57 Artifacts—Coin Purse



illustration by Tim Oliphant™

## Musings

Nothing is said that has not been said before.

—Terence, Roman playwright of North African descent (died c. A.D. 159)

Check out our online teacher's guides at [WWW.CRICKETMEDIA.COM/TEACHER-RESOURCES/](http://WWW.CRICKETMEDIA.COM/TEACHER-RESOURCES/)

LIKE US ON FACEBOOK  
[www.facebook.com/cricketmedia](http://www.facebook.com/cricketmedia)



A PARENTS' CHOICE Gold Award Winner 2009  
Silver Award Winner 2010  
Silver Award Winner 2013  
Gold Award Winner 2014  
2012 Teacher's Choice Award winner  
George Washington Honor Medal Award Winner

Indexed and/or Abstracted in: Children's Magazine Guide, Primary Search and Middle Search, Readers' Guide for Young People, Readers' Guide to Periodical Literature, Vertical File Index, and at [www.cricketmedia.com](http://www.cricketmedia.com)

Editorial and Marketing Office: DIG, 70 East Lake Street, Suite 800, Chicago, IL 60601. Telephone: 312-701-1720.

DIG (ISSN 1539-7130) (USPS 000-943) is published 9 times a year, monthly except for combined May/June, July/August, and November/December issues, by Cricket Media, 70 East Lake Street, Suite 800, Chicago, IL 60601. Periodicals postage paid at Herndon, VA, and at additional mailing offices. One-year subscription (9 issues) \$33.95. Canadian and other foreign subscribers must add \$15.00 per year and prepay in U.S. dollars. GST Registration Number 128950334. For address changes, back issues, subscriptions, customer service, or to renew, please visit [shop.cricketmedia.com](http://shop.cricketmedia.com), email [cricketmedia@cdfulfillment.com](mailto:cricketmedia@cdfulfillment.com), write to DIG, P.O. Box 6395, Harlan, IA 51593-1895, or call 1-800-821-0115. Postmaster: Please send address changes to DIG, P.O. Box 6395, Harlan, IA 51593-1895.

Editorial office, 70 E. Lake Street, Suite 800, Chicago, IL 60601. January 2016, Volume 18, Number 1, © 2016, Carus Publishing dba Cricket Media. All rights reserved, including right of reproduction in whole or in part, in any form. For information regarding our privacy policy and compliance with the Children's Online Privacy Protection Act, please visit our website at [cricketmedia.com](http://cricketmedia.com) or write to us at CMG COPPA, 70 East Lake Street, Suite 800, Chicago, IL 60601.

Printed in the United States of America.

1st printing Quad/Graphics Midland, Michigan December 2015

From time to time, DIG mails to its subscribers advertisements for other Cricket Media products or makes its subscriber list available to other reputable companies for their offering of products and services. If you prefer not to receive such mail, write to us at DIG, P.O. Box 6395, Harlan, IA 51593-1895.

# The Roman World at its Height A.D. 117



## 5 Raucous Rome (in Africa) Facts

**1** The label “Punic” derives from the Latin *punicus* (“relating to Carthage”), which, in turn, derives from the Greek *Phoinike*, meaning “Phoenicia” or “land of purple”—a reference to the purple dye for which the Phoenicians were famous.

**2** A Carthaginian navigator named Hanno recorded his exploration of the west coast of Africa. He was the first to do so.

**3** The Roman theater in Leptis Magna is the oldest theater in Roman Africa.

**4** Each year, Carthaginians elected two chief magistrates, called *suffetes*, to serve as co-rulers for the following year.

**5** The Romans called the African land they first controlled *Africa terra* (“land of Afer”). *Afer* (plural: *Afri*) is what the Romans called the Carthaginians.

**About the cover:** “Welcome to Leptis Magna, one of the most spectacular cities of the Roman Empire. It’s a beautiful day, and Mudd, Patty, Sly, and I can’t wait to show you around here. Then we’ll be off to other areas in North Africa that Rome claimed as its own.”

**PICTURE CREDITS:** © Eric Lafforgue/agefotostock.com: front cover; Peter Hermes Furian/Shutterstock.com: 1; © Fine Art Images/agefotostock.com: 2–3; © Look and Learn/Bridgeman Images: 5; © Werner Forman Archive/agefotostock.com: 6–7; Anna Kucherova/Shutterstock.com: 8 (top); Musée Archeologique, Cherchell, Algeria / Ancient Art and Architecture Collection Ltd./Bridgeman Images: 8 (bottom); Irina Fischer/Shutterstock.com: 9 (top); Gianni Dagli Orti/The Art Archive at Art Resource, NY: 9 (bottom); V&A Images/The Art Archive at Art Resource, NY: 10–11; Coeli French Bequest, Hammersmith and Fulham Council, London / Bridgeman Images: 17; © Ivy Close Images (www.ivycloseimages.com): 18; geraria/Shutterstock.com: 18–19 (background); cpaulfell/Shutterstock.com: 22–23, 23 (top); Photoman29/Shutterstock.com: 23 (bottom); Pascal RATEAU/Shutterstock.com: 24–25; John Copland/Shutterstock.com: 25 (both), 28, 29 (middle); BigRoloImages/Shutterstock.com: 29 (top left); Aleksandra H. Kossowska/Shutterstock.com: 29 (top right); © Bianchetti/Leemage / Bridgeman Images: 31; © Heritage Images/agefotostock.com: 32; Wood Ronsaville Harlin, Inc. USA / Bridgeman Images: 33 (top); Renata Sedmahoy/Shutterstock.com: 33 (bottom left); © Mary Evans Picture Library Ltd/agefotostock.com: 33 (bottom right); Ken Welsh / Bridgeman Images: 34; Archives Charmet / Bridgeman Images: 35; Bridgeman Images: 36; Rachelle Burnside/Shutterstock.com: 36 (inset); National Gallery of Victoria, Melbourne, Australia / Felton Bequest Bridgeman Images: 37; courtesy of © The Antinopolis Foundation, Inc./photo by James B. Heidel: 44 (both), 45 (both), 46 (both), 47 (middle), 48, 48–49, 49 (all), 50 (both), 50–51, 51, 52, 53, 54 (top left), 56 (all), 57; courtesy of © The Antinopolis Foundation, Inc./photo by James B. Heidel (Plate xx from vol. x of *La Description de l’Égypte*): 46–47; courtesy of © The Antinopolis Foundation, Inc./photos by Rosaria Pintaudi: 47 (bottom); courtesy of © The Antinopolis Foundation, Inc./Drawing by Kris Strutt: 53 (inset), 54 (top right); courtesy of © The Antinopolis Foundation, Inc./photo by Kris Strutt: 55 (left); Photo by Francisco Goncalves: 55 (right); © Pictorial Press Ltd/Alamy: back cover (top); Brendan Howard/Shutterstock.com: back cover (bottom). Cricket Media has made every effort to trace the copyrights of these images.

## CONSULTING EDITORS

**Sarah Dawson**, doctorate in classical archaeology from Brown University; **Elizabeth Fraccaro**, Mediterranean archaeologist; **Anthony Hollingsworth**, professor of classics, Roger Williams University; **James B. Heidel**, architect and epigraphic artist for the University of Florence, Italy’s archaeological mission to Antinopolis, and for the Epigraphic Survey of the University of Chicago in Luxor, Egypt; **Angela Murock Hussein**, archaeological consultant and assistant director of

Mochlos Excavations, East Crete; **Liz Johnson**, master’s degree in classics, Tufts University; **Carolyn Fluehr-Lobban**, professor emerita of anthropology at Rhode Island College and adjunct professor of African Studies at the Naval War College; **Richard A. Lobban**, professor emeritus of anthropology at Rhode Island College and adjunct professor of African Studies at the Naval War College; **Nell Wright**, teacher of Latin and Greek

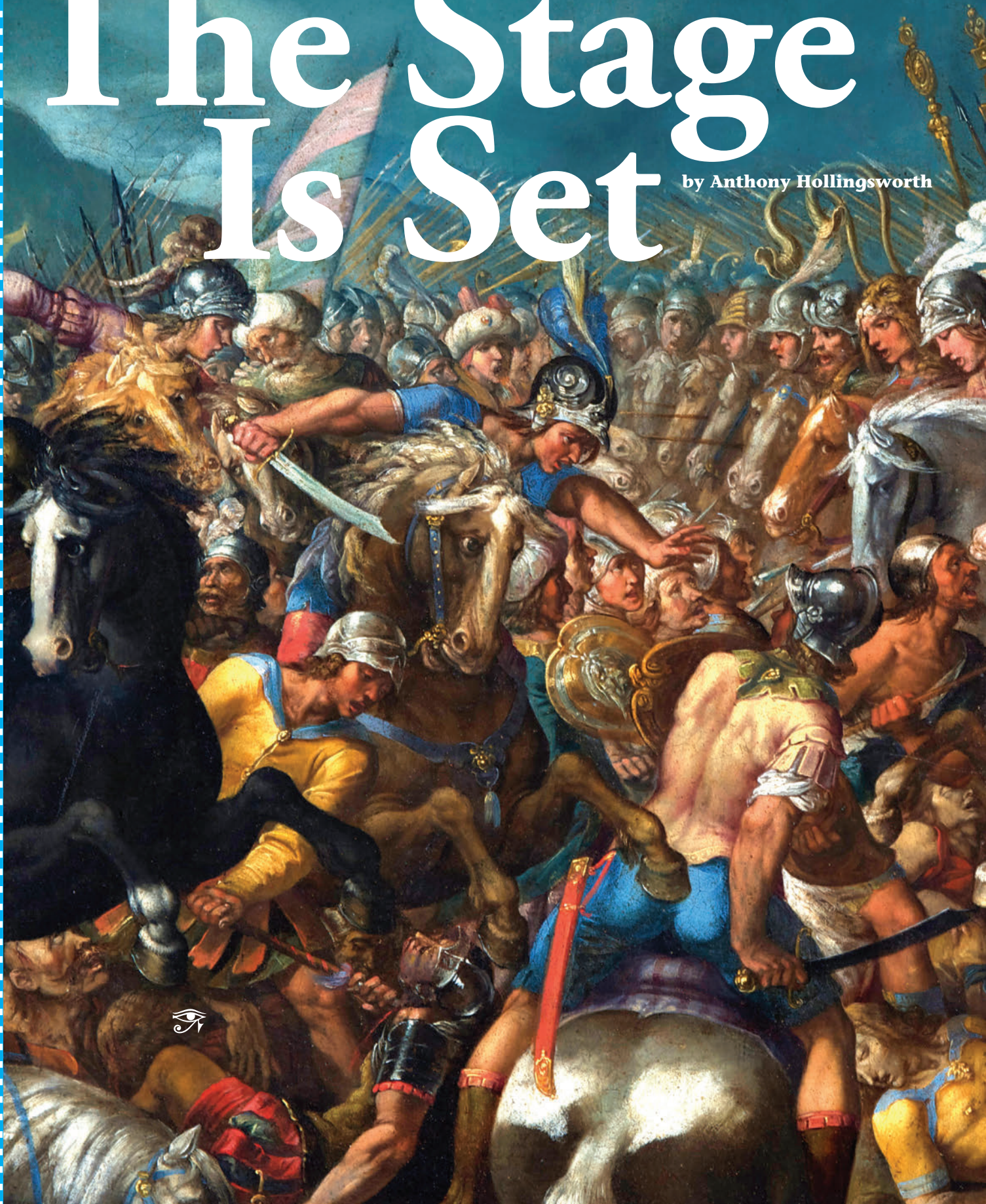


**STAFF:** Rosalie F. Baker Editor, Nicole Welch Art Director, Patrick Murray Designer, Catherine Connors VP of Editorial & Content, James M. O’Connor Director of Editorial, Christine Voboril Permissions Specialist, Stephen L. Thompson Copy Editor, Patricia Silvestro Proofreader, **EDITORIAL CONSULTANT:** Naomi Pasachoff; Research Associate, Williams College, Williamstown, Massachusetts; **ADVISORY BOARD:** Paul G. Bahn: Archaeologist and Author; Nancy S. Bernard: Archaeologist; Diane L. Brooks, Ed.D.: Director (retired), Curriculum Frameworks and Instructional Resources Office, California Department of Education; Vaughn M. Bryant: Director, Palynology Laboratory in Department of Anthropology, Texas A&M University; Ken Burns: Florentine Films; Ross E. Dunn: Professor of History, San Diego State University; Peter Feinman: Director, Institute of History, Anthropology and Education; Richard A. Gould: Chairman and Professor, Department of

Anthropology, Brown University; Gordon Grimwade: Archaeologist and Writer, Australia; A. Gwynn Henderson: Kentucky Archaeological Society; Donald James Johnson: Professor Emeritus, New York University; Jean Elliott Johnson: Teacher and Director (Retired) of the Asia Society’s TeachAsia Project; Martha S. Joukowsky: Professor Emerita, Brown University, Department of Anthropology Center for Old World Archaeology and Art; Director, Brown University Petra “Great” Temple Excavations; Richard A. Lobban, Jr.: Archaeologist and Executive Director Sudan Studies Association; Elena Miklashevich: Kemerovo State University, Russia; Robert B. Pickering: Director of Curatorial Affairs and Public Programs, Gilcrease Museum, and Director, Museum Science and Management, University of Tulsa; Margaret Pruech: Art historian, Archaeologist, and Lecturer in East Asian Art; Joseph M. Pucci: Associate Professor of Classics, Medieval Studies, and Comparative Literature, Brown University; Heidi Roupp: Past President, World History Association; Shirley J. Schermer: Office of the State Archaeologist, University of Iowa; KC Smith: Museum of Florida History; Sandra Stotsky: Professor of Education Reform, 21st Century Chair in Teacher Quality, University of Arkansas

# The Stage Is Set

by Anthony Hollingsworth





# 202 B.C.

was a very good year for Rome and a very bad year for Carthage. It was the end of the Second Punic War, and the Carthaginian armies, under their general Hannibal, had been defeating Roman armies in battle after battle. The Carthaginian armies had even invaded Italy. But now, to their surprise, the Romans were not begging for peace. Rather, their navy was sailing toward North Africa with every intention of invading Carthage and destroying its army. How could this be? How could a city that was on the brink of destruction find the courage and resources to stage a counter-attack?

To answer these questions and to understand how Rome's invasion would change North Africa's destiny, we need to step back almost 300 years, to 509 B.C., the beginning of the Roman Republic. It was in that year that the Romans and Carthaginians first met, made peace treaties, and saw each other as a threat.

## When Carthage Ruled

In 509 B.C., Carthage enjoyed superpower status. Its people controlled trade routes throughout North Africa and Spain and were very wealthy. Rome, on the other hand, was a small town that had won its independence from the Etruscan kings to the north only recently. Nothing about Rome's status in the ancient world suggests that the Carthaginians viewed its people as a threat. Most scholars believe that Carthage's leaders hoped to continue the treaties with the new Roman leaders, which the Etruscans—the former rulers in Rome—had signed. The Romans, on the other hand, needed to buy grain from Sicily

and other Carthaginian-controlled areas and were eager to finalize this agreement.

For that first agreement, it is clear that Carthage dictated the terms. According to the ancient Greek historian Polybius, Rome agreed that it would not sail too close to North Africa, trade in towns that the Carthaginians held without their permission, or travel into the areas of Sicily that Carthage controlled. The Carthaginians did agree to allow Roman merchants to trade in certain parts of Sicily. Carthage also promised not to attack Rome or the lands bordering Rome. For Rome, the treaty was perfect. It allowed its leaders to focus attention on Italy without fearing a Carthaginian invasion. The treaty was also good for Carthage as it allowed its merchants to continue trading throughout the Mediterranean world without the need to think about Rome as a rival.

### Equals Now

Fast forward about 160 years, to 348 B.C. The two nations have signed a second treaty that reflects the fact that Rome's position in the world has changed. Not only have Rome's armies defeated many neighbors, but Rome has also survived attacks made by the Gauls to the north. As a result, Carthage has begun to see the possibility of Rome as a military threat and as a business partner. The new treaty reflected such changes. The terms stipulated that

Rome could not create cities in North Africa or on the island of Sardinia. It could, however, do business in Carthage, and Carthage could do business in Rome. In addition, the treaty included the phrase, "there shall be friendship between the Romans, their allies, and the Carthaginians."

Then, about 70 years later, the Romans and Carthaginians negotiated a third treaty. Rome's position in the world had changed again—this time, dramatically. Its rulers now controlled most of Italy and were looking toward Sicily. At the same time, Carthage saw Rome as an ally against its enemies in Sicily, the Syracusans. This third treaty reflected both a friendship and an alliance between the two. The terms were basically the same as those of the last treaty, but Carthage now added that it would support Rome if that nation needed naval transportation to Sicily. The two powers also agreed to help each other against the Greeks living in Italy and Sicily.

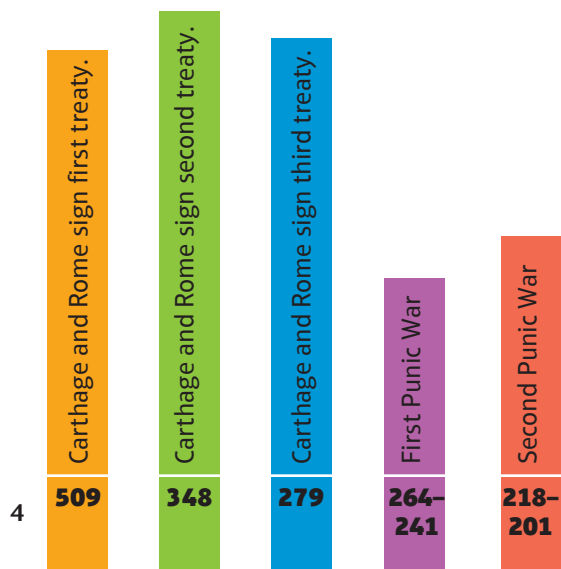
### The Tide Turns

Just four years later, Rome took control of the Greek cities in Italy, thereby extending its rule across all the land south of the city of Rome to the Mediterranean Sea. The Romans learned the technology and naval skills of the Greeks. Eleven years later, in 264 B.C., the First Punic War began, pitting Carthage against Rome. No longer were the two allies. Rather the two were embroiled in a conflict that lasted more than 20 years.

Little more than 20 years later, in 218 B.C., the Second Punic War began. That same year, Carthaginian general Hannibal invaded Italy, fully confident of complete victory. But the Romans were not ready to accept defeat. Rather, they decided not to continue fighting the enemy on Roman lands, but to take the war to Africa. The plan was to force Hannibal to return home and fight there. The two armies met at Zama in 202 B.C. (see illustration pages 2–3). The Romans won. Never again did Carthage return to its past glory, and Rome made North Africa a part of its world.

.....  
**Anthony Hollingsworth** is a professor of Classics at Roger Williams University and a frequent contributor to and avid reader of DIG magazine.

### TIME LINE (all B.C.)



A Roman official oversees the razing of Carthage. Tradition said that the Romans plowed the fields with salt so that nothing would ever grow there again.



# *Africa* **Proconsularis**

by Richard A. Lobban





**T**he early Roman Empire was built on military conquest and an ordered political structure. This organization traced its beginnings to the sixth century B.C. and three tribes in what is now central Italy. It was after the Battle of Zama in 202 B.C. that the Romans began to control what they would call *Mare Nostrum* (“Our Sea”—the present-day Mediterranean Sea). At Zama, the Roman general Publius Cornelius Scipio—later known as Scipio Africanus—defeated Rome’s arch enemy—the Carthaginians. It was during this conflict, known to history as the Second Punic War—that the Carthaginian general Hannibal invaded Italy from the north, after crossing the Alps with his troops and elephants.



**Here’s a rock painting uncovered in present-day Libya. It dates to between 500 B.C. and A.D. 500, and it was done by the Garamantian people.**

### ➔ **MORE LAND, MORE CONTROL**

Following the defeat in 188 B.C. of the Greek Seleucids, Rome gained even greater control of the Mediterranean. Then came 146 B.C. and the destruction of Carthage following the Third Punic War, events that led to Rome’s extending its control even further across North Africa. Now Rome-appointed officials maintained law and order and collected revenue, tribute, and taxes from the North African people under its authority.

Geographically speaking, “Roman Africa” meant the northeastern peninsula of Tunisia, which was a derivative of either a **Punic** or **Berber** word. It was from this foothold at Carthage that Rome then extended its control west to what is today eastern Algeria and east to what is today western Libya. And, it is this area

that was known as *Africa Proconsularis*, the western part of which was also called “Numidia.” Scipio, the Roman general credited with the victory at Zama, was even given the right to assume *Africanus* as an honorary name.

### ➔ **MEET THE ‘BER BERS’**

To the south of *Africa Proconsularis* were the lands of people history refers to as the Garamantes. To the ancient Greeks and Romans, the words they spoke were unintelligible. So, the Greeks referred to them as *ber bers*, a phrase they felt reflected their “twittering sounds.” From *ber bers* came the Roman word *barbarus*, which entered English as “barbarian.” As Roman control spread eastward across North Africa, the use of *barbarus* persisted to refer to people living beyond the areas under

**Punic** refers to anything or anyone relating to Carthage. It derives from the Greek *Phoinix*, meaning “Phoenician.”





to Egypt. But he did allow his administrators there to continue the practice Cleopatra and her ancestors (all Greeks) had followed. This meant that local people were the public officials. The loyalty of these people, however, was purchased, and they remained in power only as long as they did not oppose the Romans. Egyptian wealth flowed richly to Rome, and, as emperor, Augustus built many important temples, including that at Kalabsha, in Egypt (**SEE PHOTO LEFT, BOTTOM**).

### ➔ **THE ROMAN WAY OR...**

Augustus appointed Cornelius Gallus as a prefect of Egypt. He crushed revolts in Egypt, incorporated local Egypto-Nubian deities into the Roman pantheon, and hired Nubian guards to patrol the border areas. Gallus also made it clear to the Nubian kingdom upstream on the Nile that it should respect the fortified trading town at Aswan. Perhaps Cornelius pushed too hard because Augustus requested his suicide in 25 B.C. His replacement was Aelius Gallus, who followed the mandates of Augustus.

While on a military mission to Arabia Felix (present-day Yemen), Aelius Gallus left Aswan exposed. The Nubians saw this as a military opportunity. The queen—either Amanirenas or Amanishakete—attacked Aswan around 24 B.C. Following the battle, she brought back a bronze bust of Augustus to her city of Meroe. The victory was short-lived. When Aelius returned to Aswan in 23 B.C., he ordered a punitive counter attack on Meroe. Such was life at the edges, both to the east and to the west, of the Roman Empire.

.....  
**Richard A. Lobban** is professor emeritus of anthropology at Rhode Island College, adjunct professor of African Studies at the Naval War College, and a former resident of Carthage.



**If you visit Kalabsha, near the Aswan Dam in southern Egypt, don't miss a trip to see this temple that was built by the Roman emperor Augustus.**

Roman control, such as the *Barabra* or Nubians, who lived to the south of Egypt along the Nile.

In 31 B.C., the Roman leader Octavius defeated Cleopatra VII at the battle of Actium and took control of Egypt. Octavius, who would later become Augustus and rule the Roman world as its first emperor, never again returned

**Berber** refers to a member of an indigenous people of North Africa.



# live 'Money'

by Jackson Kuhl

**L**ittle did the citizens of Leptis Magna (SEE ALSO PAGES 24–26) realize that 48 B.C. would prove a fateful year for their city. At the time, a civil war was dividing the Roman Republic. On one side was the Roman Senate, led by Pompey; on the other was Julius Caesar and his staunch supporters.

So it was in 48 that the Roman statesman Cato the Younger, after a disastrous defeat at Pharsalus in Greece, went to Leptis Magna. With him were soldiers loyal to Pompey. All were welcomed by the people there.

## » An 'Oily' Tax

But Caesar was not about to stop at Pharsalus. In his determination to topple those who opposed him, he swept through North Africa, conquering the remnants of those forces pledged to Pompey. He also imposed his rule on areas such as Leptis Magna that had supported his enemies. As punishment for this support, Leptis Magna had to pay Rome an annual tribute of 300,000 measures of olive oil—the equivalent of three million pounds.

Olive oil was vital to the Roman economy. Just as today, it was used as cooking oil and as a sauce and condiment. The ancients also used it as lighting fluid in lamps and as a part of the bathing process. At the time, soap did not exist in

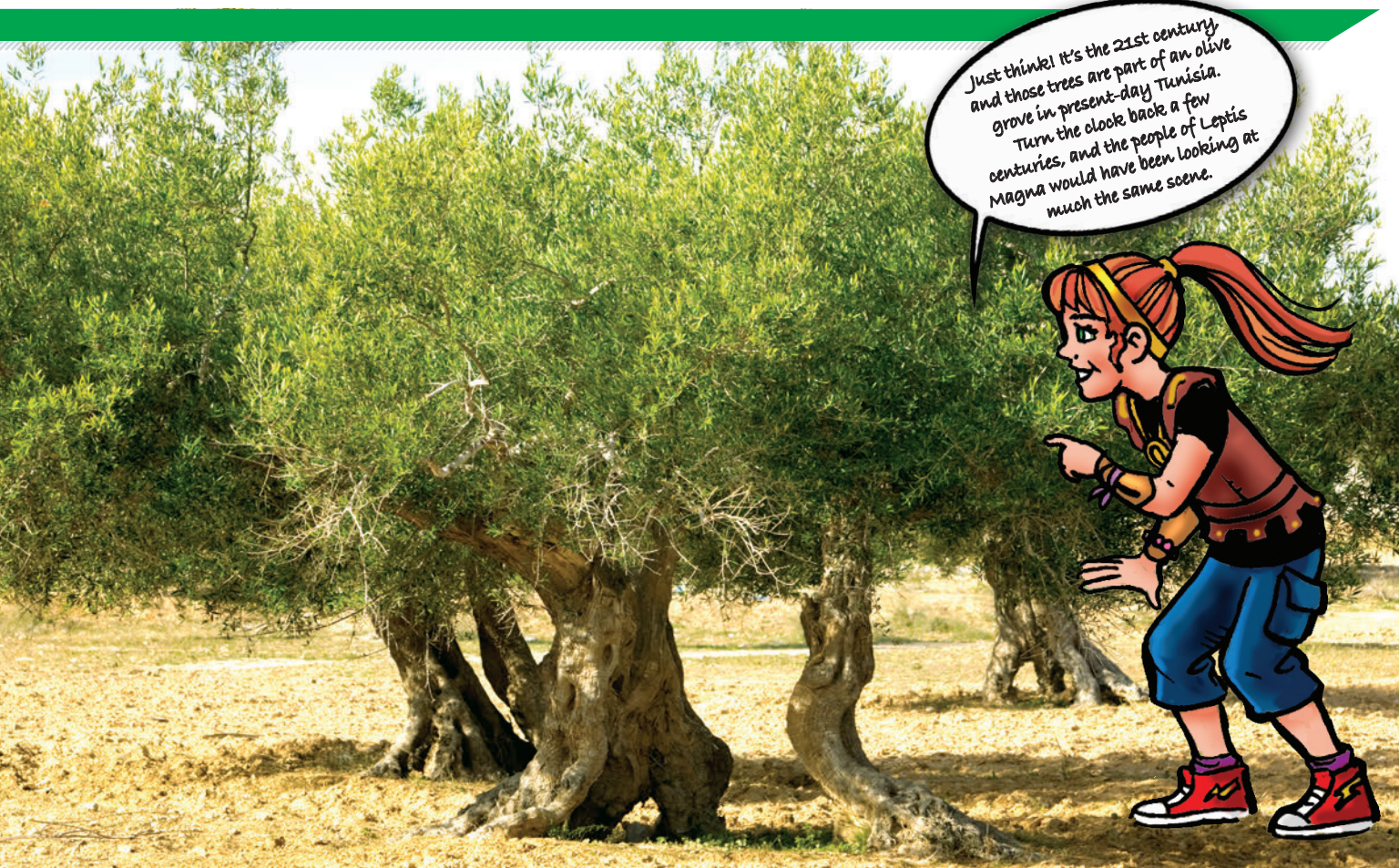
Rome. Olive oil production supported another industry as well: the manufacture of the ceramic **amphorae** that were used to hold the oil.

## » Where Dry Is OK

The inhabitants of Leptis Magna specialized in olive agriculture. While wheat grew well along the fertile Mediterranean coast, it proved much more difficult to grow in the drier inland areas. The reason? Wheat requires at least 16 inches of rainfall every year, and olive trees need far less. As a result, farmers living beyond the town's borders planted orchards of olive trees on



**Hard work, to be sure—a Roman shakes olives from a tree. The mosaic dates to the first century B.C.**

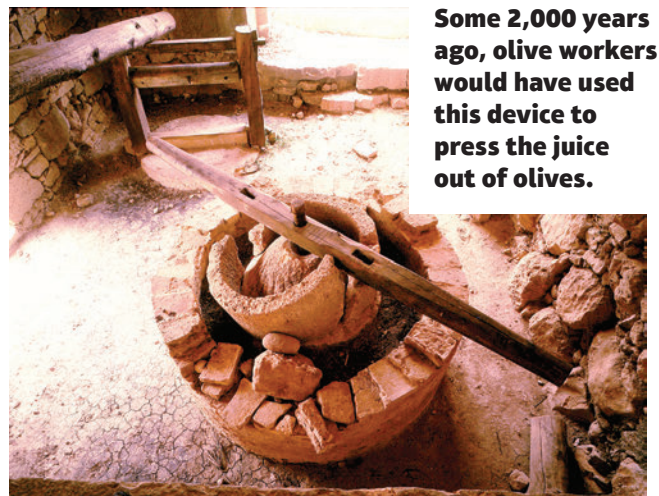


land that could not support wheat. Often, they arranged the trees on terraces cut into the hillsides.

These farms centered around two-story villas. On the first floor were workshops and storerooms. Upstairs were the living quarters for the landowner and his family. Beyond the villa were ovens, bathhouses, and the workers' homes. It was the duty of Roman legionnaires who patrolled the border farther south to keep the farms safe.

### » From the Tree to the Bathhouse

To harvest the olives, workers shook the trees, letting the olives fall to the ground, where they were picked up and placed in baskets. The olives were then placed in large presses. The enormous stone of the press then crushed baskets full of olives against a stone base, allowing the oil to seep out of the baskets and into a drain. The oil was funneled into amphorae for storage and transport to dockside warehouses in Leptis



Magna. From there it was shipped to Rome and the rest of the empire. Because of the dry environment, there was little available firewood. Workers would dry the leftover pulp from the olives and burn it as fuel, especially in the **hypocaust** systems of the local bathhouses.

By one estimate, there was an olive press every mile in the vicinity of Leptis Magna—a city that produced five million gallons of olive oil every year.

**Hypocaust** refers to a hollow space under the floor of an ancient Roman building, into which hot air was sent for heating a room or bath.



# An Emperor's Prize

by Elizabeth Fraccaro

**U**nder Augustus' rule, the *Pax Romana* ("Roman Peace") prevailed. Trade and goodwill spread throughout the Roman Empire, whose boundaries now extended into modern-day Germany, Spain, France, and much of northern Africa. While a relatively peaceful time, these years had been ushered in by dramatic and often violent actions.

## The Groundwork Set

Octavius was quite young—19 years old, to be exact—when he entered the deceitful world of Roman politics. Wanting to avenge the assassination of Julius Caesar, who had named him his heir, Octavius formed an alliance with two powerful Romans—Marc Antony and Lepidus. Together they suppressed the power of the Senate and defeated their enemies. Unfortunately, each of the three men sought to rule Rome. Lepidus was the first to be ousted from the alliance. After forcing him into exile, Antony and Octavius quickly divided the empire between them. Octavius took Rome, and Marc Antony took Egypt.

Upon learning that Marc Antony was in love with Egypt's queen, Cleopatra, many



◀ Here's an 18th-century depiction of the Battle of Actium. Can you spot Cleopatra? How about Marc Antony? (Answers below.)

### A Title with Power

Octavius' successful governance of the provinces prompted the Senate to give Octavius the title of *Augustus* (Latin for "illustrious one") in 27 B.C. This was not just a name; rather, it granted Octavius religious as well as political authority. Further, in giving Octavius this title, the Senate maintained an illusion of a free Republic whose political power continued to be in the hands of the Senate. But, in reality, the Senate was giving Octavius autocratic power, and the term was for life.

The province of Egypt, however, was not absorbed into the Roman Empire. Instead, it became part of Octavius' *patrimonium*—that is, his private property. The same policy was

followed for every emperor who succeeded him. Octavius, in turn, rented land to the Egyptians, generating a huge sum of revenue. He used this money to finance his empire, including military expeditions and public works such as temples, theaters, roads, and aqueducts. He also used the funds to provide *panem et circenses*

("bread and games") that included extravagant entertainments such as gladiator fights. Another use for these funds was the distribution of free food, which pleased the Roman people and served to keep their loyalty. Such policies made Octavius genuinely popular with the Roman people, including the Roman citizens of Egypt.

.....  
**Elizabeth Fraccaro**, a graduate of Indiana University in 2012 and University College London in 2014, is a Mediterranean archaeologist based in Chicago.

**DID YOU KNOW?**  
The month of August is named after Octavius—that is, after his honorary title of *Augustus!*

Romans feared that she would claim control of the Roman Empire for herself. They reasoned that she would do that with the help of Marc Antony. As for Octavius, he did not trust Marc Antony and so decided to attack Egypt before Antony and Cleopatra could strike at Rome. In 31 B.C., at the Battle of Actium (see above), Octavius destroyed the Egyptian fleet and soon after captured Alexandria. Defeated, Antony and Cleopatra both committed suicide the following year. Octavius then annexed Egypt, and the Senate proposed that he assume a 10-year command of the Roman provinces that might be troublesome. One of these provinces was Egypt.

**ANSWER:** Cleopatra is enthroned on a boat in the right side of the painting. Antony stands in the bow (front) of his ship, with a sword in his outstretched hand.



# Next Stop— NUMIDIA

**N**orthern Africa possessed many important resources—iron, timber, and a temperate growing climate, all of which attracted trade from the lands bordering the Mediterranean Sea. The Phoenicians, who colonized North Africa from their home area in what is today Lebanon, Syria, and Israel, had followed the practice of establishing commercial centers at the Mediterranean’s best trading sites. The most widely known was Carthage in present-day eastern Tunisia.

## Characters

### Narrator

**Aemilianus** Roman general and politician (better known as Scipio Aemilianus)

**Jugurtha** king of Numidia  
118–106 B.C.

**Marius** Roman general and politician

### Senators

**Memmius** Roman politician and senator

**Metellus** honorable Roman senator



Among the trade goods passing through Carthage to the Mediterranean world were those from Numidia in present-day Algeria and western Tunisia. As the Romans extended their boundaries, they knew well that breaking the Carthaginians' hold on Mediterranean commerce would offer their merchants great opportunities for wealth.

After the Romans defeated and destroyed Carthage in the Third Punic War (149–146 B.C.), they had let the Numidians govern themselves. There was, however, a mutual agreement that, in return, the Numidians would be beholden to the rich Romans who sponsored them.

So it was that in 134 B.C., when Rome went to

war in Spain and lay siege to the city of Numantia, the Roman general in charge, Scipio Aemelianus, looked to the highly trained Numidian cavalry for help. Leading these troops was Jugurtha, the illegitimate grandson of King Masinissa. Ruling Numidia at the time was Micipsa, Masinissa's son and successor. Many Numidians, however, preferred Jugurtha to Micipsa. To avoid political problems, Micipsa had sent Jugurtha to Spain to head the Numidian cavalry division. During the final siege of Numantia in 133 B.C., Jugurtha fought alongside a Roman named Gaius Marius, who, just years later, would become one of Rome's most powerful politicians.

### Scene 1

133 B.C., Aemilianus' tent

**Aemilianus:** Jugurtha, thanks to you, the defeated Numantians will star in my triumphal parade. Take this letter praising your work to your king in Numidia.

**Jugurtha:** Thank you, Aemilianus.

**Aemilianus:** And some advice: Don't bribe Romans. Remember, Micipsa depends on my family to keep his power in Numidia. Remember, too, that he does not bribe us. Rather, he only asks for favors.

**Jugurtha:** But he does so while he hands you gold. So, what's the difference?

**Aemilianus:** Our Roman system of clients and patrons is complex and above **venality**.

**Jugurtha:** What's venality?

**Aemilianus:** It's what is known as bribes in your country.

**Jugurtha:** You mean...We're your client, but we can't bribe you?

**Aemilianus:** That's right. It's proper to ask for a favor and offer one in exchange. Numidia's a rich land. Along its trade routes, we import iron

and timber to use in Rome. In exchange, we protect you. It's a favor to your king. Now you, young man, should have some Roman patrons. How do you like Gaius Marius?

**Jugurtha:** He's a brave soldier, clever and wealthy.

**Aemilianus:** All true, but he's not the patron for you. He's not a member of the aristocratic class. Therefore, he has no influence, no chance for power.

**Jugurtha:** Energy and spunk propel a person to power, not family.

**Aemilianus:** His ambition is also too obvious; he's without morals. He'll have to bribe to get power, and that doesn't work in Rome.

**Jugurtha:** Thank you for teaching me about venality and your Roman morals. Who knows when it might come in useful?

**Aemilianus:** My regards to the king.

**Narrator:** Jugurtha then reports to Marius.

**Jugurtha:** Aemilianus says you don't have the right connections to make it in Rome.

**Marius:** Perhaps, but I will become a general and will be elected **consul** anyway. Aemilianus' life has been easy, so he doesn't know that there are tricks. Most of the soldiers in his army are clients who owe his family.

**Jugurtha:** Marius, when you need an army, how will you manage without clients?

**Marius:** I'll recruit farmers and laborers. I'll pay them myself. No one's tried that before. Generals, such as Aemilianus, simply buy powerful friends and elections. I'll buy devotion.

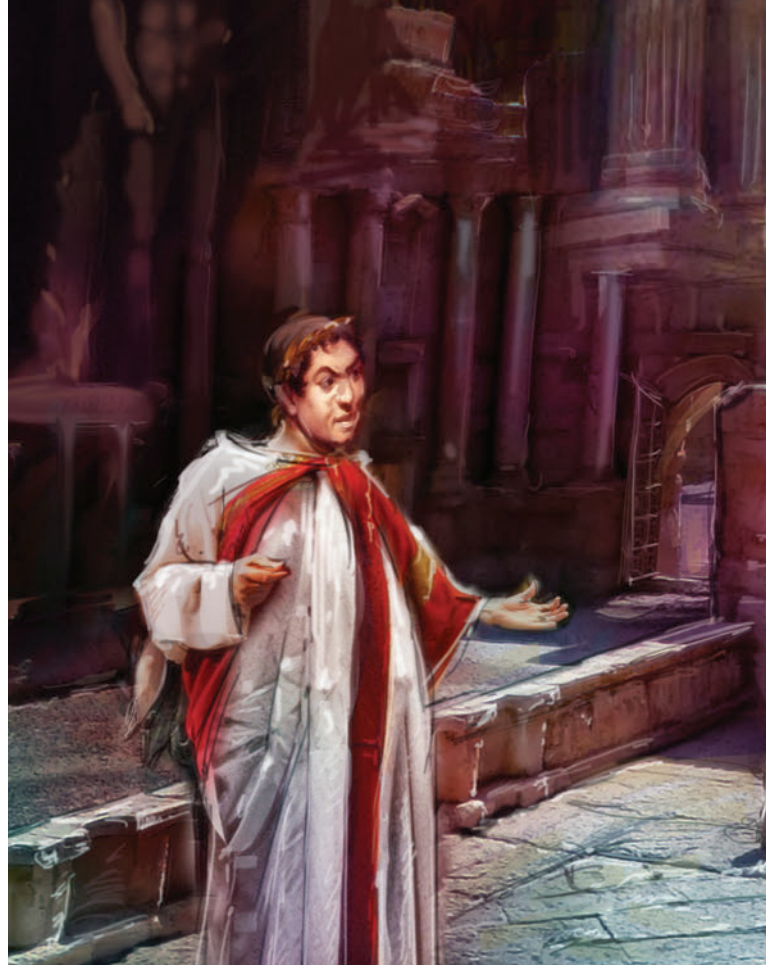
**Jugurtha:** Hmm... Aemilianus says there's no venality in Rome, but I think I see how this works.

## Scene 2

111 B.C., Rome

Jugurtha is talking with Marius.

**Narrator:** *The Roman Senate has called Jugurtha to*



*Rome. They want to know more about the treaty that he signed with a Roman consul after the Senate had declared war on him. The summons had come after Jugurtha ruthlessly took control of Numidia and ordered the execution of his opponents, including his half-brother Adherbal and Italian residents who had sided with Adherbal.*

**Jugurtha:** Marius, I have a question. I bought off the Romans who suspect me of wrongdoing by offering huge bri... favors. Now the Senators want to question me about my actions. Marius, who are the people I should approach so I won't be charged with murder?

**Marius:** What's that in your hand, Jugurtha? Gold? Are you trying to bribe me, a legally elected official?

**Jugurtha:** No, not at all. I seek information, but only as a favor that you would grant me.

**Marius:** In that case, here's a list of names. Steer clear of Memmius, however. He's too honorable. Start with the loudmouth Scaurus.





He's good to have on your side.

**Narrator:** *A month later, Jugurtha meets again with Marius.*

**Jugurtha:** Bribing Scaurus was easy. But, the Senate still voted against me! What do you know about Bestia, the general assigned to Africa?

**Marius:** Nothing, except that Scaurus will be his second-in-command.

**Jugurtha:** Scaurus! Excellent. He's my patron now.

### Scene 3

111 B.C.—the end of summer. The Roman Senate

---

**Narrator:** *Once he is back in Africa, Jugurtha uses gold to buy the allegiance of Bestia and Scaurus. He then offers to surrender to Rome. The Roman Senate is ecstatic with such a turn of events. Soon after, Jugurtha changes his mind.*

**Senators:** Bravo! Rome's the best! Down with Numidia!

**Memmius:** Honored Senators, we must prosecute Scaurus and Bestia. By taking bribes, they compromised Rome's authority in the world's eyes.

**Marius:** First, we must send for Jugurtha and have him describe Bestia's venality. Then, we should prosecute Bestia—and replace him. I humbly offer myself as his replacement.

**Senators:** Down with Bestia! Send for Jugurtha! Marius for general!

**Memmius:** Honored senators, remember that we can't appoint Marius to lead an army. He doesn't have enough—or the right—connections.

**Marius:** But I trained with Aemilianus and Jugurtha. Such service ought to count.

**Senators (muttering):** Not really. No "new" men should be offered the position of general. That should be reserved for members of our class.

**Marius (to himself):** I can't believe it. They voted to send that inexperienced Albinus against Jugurtha! Pampered rich boy against a ruthless sneak. What a disaster for Rome!

### Scene 4

110 B.C., Roman Senate

---

**Narrator:** *Marius' prediction proves true. Jugurtha easily dupes and humiliates Albinus in battle.*

**Marius:** The army in Africa has no morale left. Now maybe the Senators will vote for me.

**Memmius:** For general, I propose the incorruptible Metellus.

**Senators:** Hear, hear!

**Metellus:** I select Marius as lieutenant.

**Marius:** At least, it's a start for me.

### Scene 5

109 B.C., Numidia

---

**Narrator:** *The Romans arrive in Africa.*

**Metellus:** These soldiers are bored and lazy.

Our job, Marius, is to restore morale.  
**Marius:** I agree. We'll conquer Numidia with old-fashioned discipline!

**Narrator:** *The Romans and Jugurtha fight some conventional battles.*

**Metellus:** Jugurtha has lost most of his followers. He's in hiding, but he hasn't surrendered.

**Marius:** Half his army has defected, but now he's enlisting farm laborers and paying them himself.

**Metellus:** Lucky for us. Let's destroy their undefended crops, starve the people, and attack the city. Jugurtha will try to protect it, and we can lay siege to him.

**Marius:** Metellus, you need to remember—Jugurtha doesn't follow the regular rules of war.

**Narrator:** *Again Marius is right. Jugurtha's guerilla tactics wear the Romans down. He massacres thousands, from the rear. During a break in the battles, Marius seeks out Metellus.*

**Marius:** Metellus, I'd like to return to Rome, to run for consul.

**Metellus:** You, run for consul? You're a good soldier, but it's impossible for one of your class—unless you use venality.

**Marius:** I don't know that word. But I'll badmouth you to the army, if I can't go.

**Metellus:** Return to Rome, then. Run for consul. Good luck.

## Scene 6

107 B.C., Numidia

**Narrator:** *Marius did return to Rome. Once there, he used his money to sway senators. Soon he is elected consul, then general, and returns to Africa.*

**Metellus:** Marius, you're back?

**Marius:** I'm replacing you as general.

**Metellus:** How mortifying! Jugurtha's finally



on the run, thanks to me, but you'll get the credit. How did you get the money, and the manpower?

**Marius:** I signed up farm laborers, and I pay them myself.

**Metellus:** This is the end of the aristocracy.

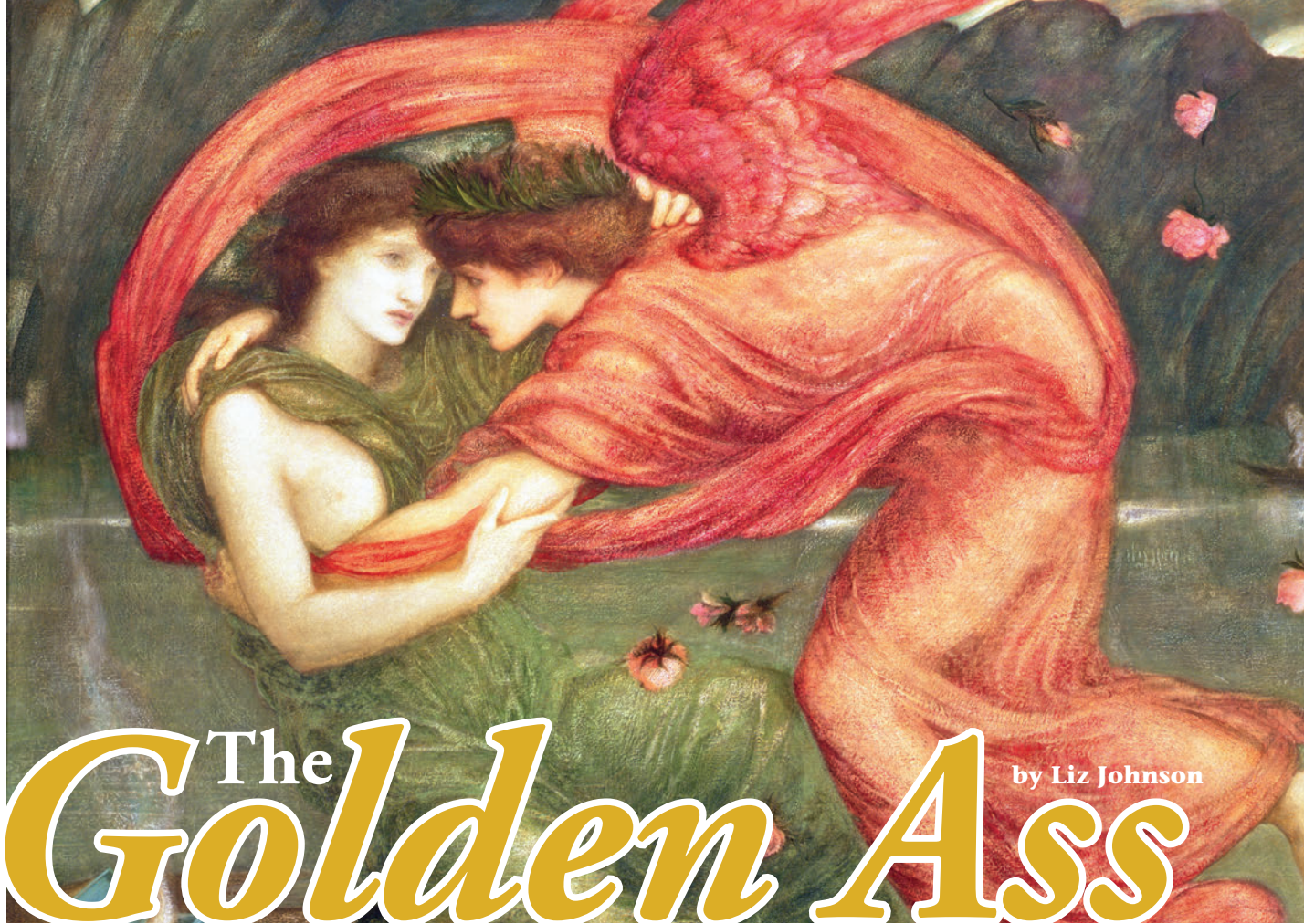
**Narrator:** *Not exactly. Rather, it is the end only of the aristocracy as the sole power in Roman politics. It is Marius who finally defeats Jugurtha, and that summer, the two leaders meet again.*

**Jugurtha:** I'm surrounded! You're putting me in chains?

**Marius:** I offered a false surrender and bribed your friends to bring you here. I learned from you.

**Jugurtha:** And I learned—from watching Rome!

.....  
**Nell Wright's** articles and stories have been appearing in magazines such as *DIG Into History* and *Cricket* for 15 years. She also teaches Greek and Latin.



by Liz Johnson

# The Golden Ass

**Y**ou may know of the ancient Roman writers Virgil, Ovid, and Cicero—but what about Apuleius? Born in Madauros in Roman North Africa around A.D. 125, Apuleius is well known for his novel titled *Metamorphoses* or *The Golden Ass*. Full of magic, violence, and adventure, it is the only complete novel written in Latin to survive from ancient times.

Apuleius attended school in Carthage and then went to Athens and Rome for further study. Upon returning to North Africa, he married a wealthy older widow. Her relatives accused him of using magic to convince her to marry him, but Apuleius successfully defended himself in court. In his defense, called the *Apologia*, he boasts of his learning and describes himself as a philosopher, orator, and writer.

*The Golden Ass* is set in Greece and tells the story of Lucius, a man who is transformed by magic into an ass and then stolen by robbers. On his subsequent travels, he suffers much abuse and

humiliation and hears many thrilling stories. One is the tale of Cupid, the god of love, and the trials his mortal lover, Psyche, must endure before they wed (the two are pictured above). Another is that of Thelyphron, who falls asleep while guarding a dead body and has his nose and ears cut off by witches. The novel ends with the Egyptian goddess Isis helping Lucius regain his human form, after which he becomes her devoted worshiper. This religious ending has led scholars to debate whether the novel is more than just an entertaining story.

While there are many ways to interpret Apuleius' work, what is clear is that *The Golden Ass* is a complex, original story that reflects many cultures—Greek, Roman, Egyptian, and African. During the Middle Ages, it was almost forgotten. In the centuries that followed, it became popular again, and people still enjoy it today.


---

**Liz Johnson** is a freelance writer, who holds a master's degree in classics from Tufts University.



# North Africa's **Silphium**

by Jennifer P. Baker



**T**oday, you can trade stocks, oil, and even livestock, but you might not have much luck if you try to exchange your mother's coriander for gold coins. However, if you lived in the seventh century B.C., you might be surprised by the importance of spices. Merchants and travelers developed trade routes from the coast of northern Africa to Europe and Asia.

While several North African cities controlled the silphium trade in ancient times and built their wealth on the spice, the two most important were the Phoenician city of Carthage in modern-day Tunisia and the Greek colony of Cyrene in modern-day Libya. These cities traded many items, but the design on a silver coin from Cyrene tells of its most important local export: silphium. In the illustration above, sixth-century B.C. king Arkesilaos weighs out bales of silphium that are being loaded on a ship for export.

### **IN THE BEGINNING**

The story of silphium begins millennia ago with a black rain falling on the barren grasslands in northern Africa (present-day Libya). As the rain begins to fall, short sprigs burst through the earth, and a previously unknown plant starts to grow. In time, this plant would travel from northern Africa to the finest homes in Greece and Rome and become an extremely valuable trade item. Its powers were the subject of stories and legends, and its trade brought enormous wealth to many cities.

### **SO WHAT MADE THIS PLANT SPECIAL?**

The silphium plant was fed to sheep and cattle to give their meat a unique flavor. While the stock of the plant was used in several recipes, the real value seems to have come from a gum resin that was extracted when a small incision was made at the base of the plant. This resin, which

the Greeks called *lascros*, was thought to have special powers. Among them were restoring sight; curing coughs, fevers, and warts; healing poisoned wounds; revitalizing the body; and helping with digestion. The first-century A.D. Roman writer Pliny the Elder called it, "one of the most precious gifts of nature." But the real story with silphium is one of ancient advertising.

Silphium is thought to be one of the earliest examples of a success story that grew out of an advertising campaign. The people of Cyrene created the legend of a plant with a supernatural origin, told tall tales of its seemingly magical properties, and promoted it widely via coinage and other artifacts. Unfortunately, the supply of silphium was not endless, and this plant seems to have come to an abrupt end.

### **WHAT HAPPENED?**

Pliny the Elder describes the drastic decline and blames it on farmers who let their sheep graze on the plants. There were other causes as well. Among them were overharvesting, farming, and the destruction of forests around Cyrene. Together, these three factors are believed to have led to soil erosion and the breaking down of silphium's natural habitat. As the amount of available silphium decreased, the cost of the spice saw a dramatic increase.

At the height of its glory, silphium was so valuable that it was stored in the treasury at Rome, and Pliny claimed it was worth its weight in silver *denarii*, a common Roman coin. Unfortunately, while the popularity of silphium brought wealth to many who worked trading it, the exploitation of the plant also led to its extinction.

.....  
**Jennifer P. Baker** has a master's degree in social studies from Columbia and teaches world history at Winsor School in Boston, Massachusetts.

## WORD ORIGINS

**Library** Visit any library and you are sure to find a book about Roman Africa—in printed or digital form. This definitely is an appropriate place for such a book as the word “library” derives from the Latin word for “book”—*liber*.

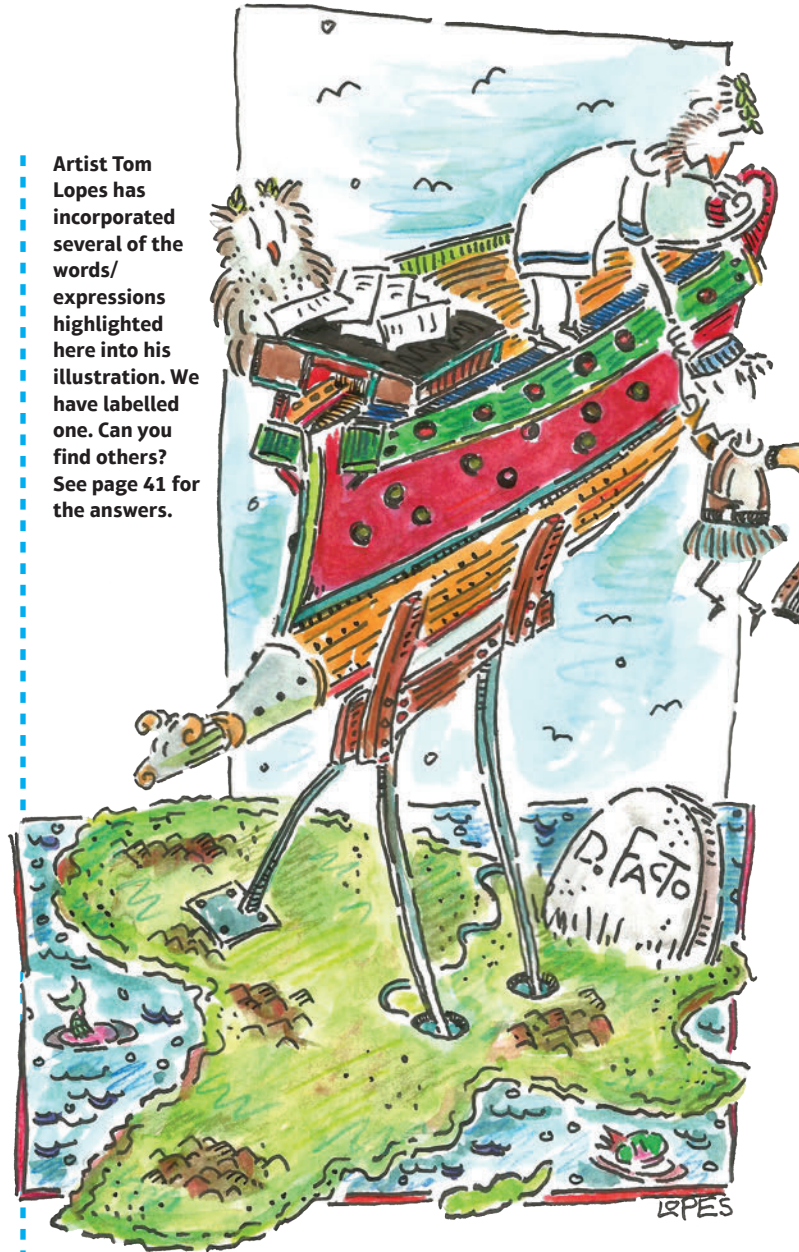
**Maritime** You read in this issue that the ancient Romans called what we know as the Mediterranean Sea the *Mare Nostrum* (“Our Sea”). It is easy to see that the first part of the word “maritime” traces its origin back to the Latin word for “sea”—*mare*. But, what about the ending “time.” Well, that has its roots in Latin, too! *Timus* is a Latin ending that signifies the “most” of something. Thus, Rome’s maritime provinces were those lands that bordered the ends of the sea. And, “maritime,” in general, refers to anything that pertains to the sea.

**Province** We’ve just looked at the origin of “maritime.” How about the origin of “province”? Does it also relate to Latin? Definitely! The Latin prefix *pro* translates as “before,” while the Latin verb *vincere* translates as “to conquer.” For the ancient Romans, a province was a territory over which they had established control—that is, they had already conquered it and now were officially ruling it. The English language expanded the meaning in the early 1600s to “an area of special knowledge.”

## WORD STORIES

**Consul** Now here’s a word that we often see in reports from major cities or governments—and, in this issue, when talking about the

Artist Tom Lopes has incorporated several of the words/expressions highlighted here into his illustration. We have labelled one. Can you find others? See page 41 for the answers.



Roman province *Africa Proconsularis*. A U.S. government Web site notes that “the United States has only one embassy and one ambassador in the capital of any foreign country, but in large countries it may have several consulates. They are typically located in the main cities of provinces or states, and each is led by a consul general.” Both “consulate” and “consul” trace their roots to *consul*, the Latin word the ancient Romans used for the chief magistrate (public) official. In fact, during the time of the Roman



**WRITE US!**

dig@cricketmedia.com

CALLIOPE/DR.DIG,

70 East Lake Street, Suite 800,  
Chicago, IL 60601

Republic (509–27 B.C.), there were two consuls—a provision in Roman law to ensure that no one person would take control and act as a king or dictator. But, let’s dig a bit deeper into *consul*. It traces its origin to the Latin verb *consulere*, meaning “to deliberate” or “to take counsel”—good advice for all consuls, don’t you think?



## EXPRESSIONS

**R.I.P.** Have you ever seen these three initials on a tombstone? Ever wonder why? The answer is quite simple—they represent the initial letters of three Latin words: *Requiscat in Pace*, which translates as “May he/she rest in peace”!

## LATIN PHRASES IN ENGLISH

In English, there are several phrases used by politicians and people in government service that have entered the English language directly from Latin. Here are a few:

LATIN PHRASE	TRANSLATION	DEFINITION IN ENGLISH	EXAMPLE
<i>Ad hoc</i>	“for this”	something done for a particular purpose	The Senate formed an ad hoc committee to review voting rights.
<i>De facto</i>	“about that which is done”	in reality, in fact	A news item spoke of a member acting as the de facto chairman of a certain committee.
<i>Ex officio</i>	“from the duty”	by virtue of one’s office or position	As chairman of the board, he was an ex officio member of every committee.
<i>Quid pro quo</i>	“something for something”	something/a favor expected in return for something	Congress definitely wanted to keep certain issues independent from any quid pro quo agreements.
<i>Sine qua non</i>	“without which nothing”	an essential condition	Governments often state that stability in a country is a sine qua non condition for a loan to a country with a struggling economy.
<i>Status quo</i>	“situation in which”	the way everything is presently	Sometimes politicians prefer the status quo, because they fear what change will bring.



HI, EVERYONE!  
COME AND  
TAKE A LOOK!



# Let's Visit El Djem

by Anthony Hollingsworth



**T**wo thousand years ago, millions of olive trees, not desert sand, filled the landscape of North Africa. The temperature was a little cooler, the soil was fertile and the climate was perfect for olive trees. From the farthest western province of Mauretania—modern-day Morocco—all the way to the eastern province of *Africa Proconsularis* (**SEE PAGES 5-7**)—modern-day Tunisia—farmers grew olive trees to harvest the oil from the olives. Used in the kitchen for cooking and at the gym for aching muscles, in oil lamps for light and even for medicine, African olive oil supplied the Roman markets and fed a hungry empire.

## A Great Trading Center

Today, when we think about computer companies, we think of Silicon Valley in California. When we

think of the latest clothes fashions, Paris, France, comes to mind. From A.D. 100 until about A.D. 300, when a Roman thought about olive oil, the town of Thysdrus in North Africa would have entered his thoughts. It was there that all the farmers sent their oil for sale and shipment. And, it is there that the wealth of ancient North Africa can still be seen. But do not try to find the city on a map, for it no longer goes by its ancient name. Today, it is known by its Arabic name, El Djem. Also, North Africa is not a present-day country. If you want to visit the archaeological site at Thysdrus, you must buy a ticket for Tunisia.

In the Roman Empire, as in all civilizations, some people were rich, some people were poor, and many were somewhere in the middle. The people in North Africa were no different, at least, not at first. When they started growing olive trees,





DON'T WORRY—I JUST WANTED TO DIG A BIT HERE, SO I LOOK LIKE I'M AT HOME!



HOLD IT RIGHT THERE, MUDD! AND NO DIGGING UNDER THE AMPHITHEATER!



HERE'S WHERE MY WINGS COME IN HANDY! LOVE FLYING THROUGH THE UNDERCROFT AT EL DJEM'S AMPHITHEATER.



everything changed. Farmers grew their olives, the presses turned them into oil, and the oil was sent to Rome. The wealth that flowed into these provinces pushed many farmers—even the poor ones—into the wealthiest class of Romans, and El Djem became the center of that wealth.

**Rivaling Rome!**

Much of the money that Thysdrus collected went to construct baths and houses for the city's residents and visitors. These structures gleamed white and housed some of the best ancient art that survives from Africa. But the jewel of the city was its amphitheater. 480 feet long and 400 feet wide, it was the largest structure the Romans ever built outside of Italy. Only the massive Colosseum in Rome, believed to have accommodated as many as 40,000 people, and the amphitheater in

Capua, a city to the south of Rome, were larger.

The amphitheater at Thysdrus (see photos above and opposite) was built in A.D. 230 by the Roman governor Gordianus. Its size was no accident. Gordianus was sending the Roman emperor a message. Rome was growing weak, and the provinces were getting stronger. Even North Africa could have monuments rivaling those of Rome. In North Africa, ambition meant everything, and even the poorest farmer could become wealthy, with just hard work and an olive field.

An **undercroft** is a vaulted chamber underneath a building.

# The Baths

by Sarah Dawson

# LEP MA



**R**ome's soldiers are not the only Romans who deserve accolades for their accomplishments. The nation's engineers do as well. Indeed, the greatness of the Roman Empire is reflected in such engineering feats as cement, vaults, arches, and aqueducts. Indeed, while Roman baths incorporated all these advances, showcasing technology was not their only function.

# at LEPTIS MAGNA



How grand—even  
the baths' remains  
are still majestic!

## A Great Place To Meet

Public baths were extremely popular with the general population. Why? Perhaps the most important attraction was the social nature of the baths. People could hold business meetings there, and they could see and even gossip about their neighbors. What encouraged these practices was the addition of secondary pools, massage areas,

and food stalls.

The arrangement of the public baths erased class distinctions. A great variety of people, from the emperor to the poorest citizen, could be seen bathing together. The baths also encouraged healing. Routine bathing, as well as specialized treatments, took place at these complexes. In fact, the public nature of the baths became synonymous with Roman culture and were found in all the provinces under Roman rule.

## Take a Peek

Leptis Magna (**SEE ALSO PAGES 28–29**) had two bathing complexes. The first, commissioned by the emperor Hadrian and known as the Hadrianic Baths, was completed around A.D. 127. Located in the heart of the city, it was among the most impressive bathing complexes built at the time. Its design was the same as other imperial baths. It had a *frigidarium* (cold room), *tepidarium* (warm room), and *caldarium* (hot room). (**SEE PHOTO AT LEFT ON PAGE 26.**) It also had a *natatio* (swimming pool) and *sudatoria* (sweat rooms). Vaulted ceilings, heated walls and floors, and marble paving represent traditional architectural and engineering advancements.

A second bathing complex, the Hunting Baths, was built during the reign of Septimius Severus. Unlike the Hadrianic Baths, which were situated in the center of the city, the Hunting Baths were located on the western plain along the Mediterranean shoreline. While modest compared with the other public buildings Severus commissioned at Leptis Magna, the Hunting Baths were architecturally important for two reasons. The first is their adaptation of the typical row-type baths—that is, all the main rooms were aligned along one axis. The second is the artful use of concrete vaulting for its ceilings.

## Let's Tour the Hunting Baths

After entering and passing through a colonnade,

See what looks like little pillars between two floors? They are part of the hypocaust, the heating system that allowed hot air coming from a manually operated furnace to flow around the pillars and heat the floor of the *caldarium*.



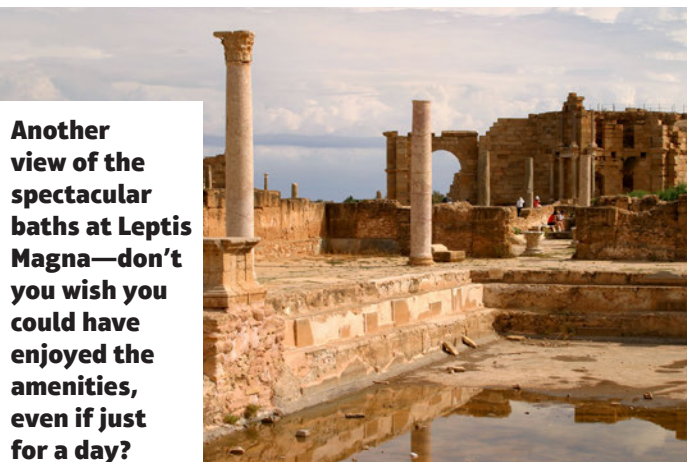
you reach the swimming pool, with its cross-vaulted ceiling and walls covered in onyx-alabaster and green-marble fragments. A few steps farther bring you to an archway and into the *frigidarium*, where a bathing sequence prescribed by ancient doctors took place. In antiquity, doctors believed that progressing through the bathing pools from cold to hot could heal various ailments and maintain good health.

The *frigidarium* had three plunge baths. The first was situated along the axis. Across from it was a many-sided niche. At either end of the main hall was a semicircular plunge bath. In the south apse is a beautiful fresco that depicts a leopard hunt. It was this scene that gave rise to the modern name “Hunting Baths.”

On the right side of the main hall, a short hallway leads into the eight-sided *tepidarium*. Continuing straight ahead, you find yourself at the start of a series of small rooms that ends with the plunge bath of the *caldarium*. To the left of the *tepidarium* is another eight-sided structure. Most likely this was the *sudatorium*. Excavations of the *sudatorium* show an entryway that may lead to additional hot rooms.

### Tracing the Water Source

With so many bathing areas, how did the people of Leptis Magna bring in water to fill the pools?



Another view of the spectacular baths at Leptis Magna—don't you wish you could have enjoyed the amenities, even if just for a day?

Most often, water entered Roman bath complexes through a system supplied by aqueducts. But, at Leptis Magna, the source of the water supply is a mystery. A cistern was uncovered behind the Hunting Baths, but whether there was a connection between this cistern and the baths is not yet known. At the Hadrianic Baths, a cistern has also been located. The distance between the two bathing complexes, however, is considerable, and no evidence of connecting pipes has yet been uncovered. Therefore, it is doubtful that the Hadrianic cistern could have been the source of water for the Hunting complex.

On the eastern side of the city, a water system that consists of several dams, a canal, and a possible bridge is thought to have been used to divert water from the Wadi LebDAH, which runs along the eastern edge of the main city and empties into the Mediterranean Sea. Presumably, this water could have been for city use, including the baths. Perhaps the water was stored in the two cisterns associated with the baths.

While it is unclear exactly how the water entered the city, it is certain that the baths at Leptis Magna were widely used by those who lived there. In addition, the secluded area of the Hunting Baths would have made for an interesting bathing experience.

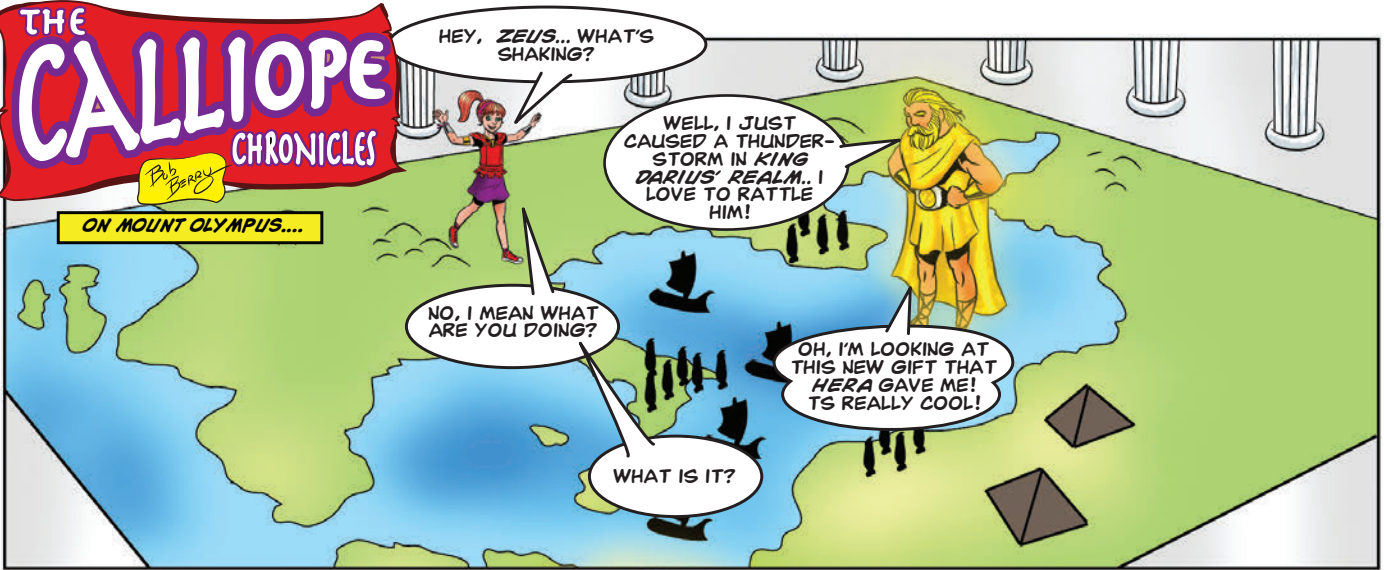
---

**Sarah Dawson**, who received her doctorate in classical archaeology from Brown University and has excavated in Portugal, England, and Greece, teaches Classical history and Latin at Boston University Academy.

# THE CALLIOPE CHRONICLES

By Barb

ON MOUNT OLYMPUS....



HEY, ZEUS... WHAT'S SHAKING?

WELL, I JUST CAUSED A THUNDER-STORM IN KING DARIUS' REALM.. I LOVE TO RATTLE HIM!

NO, I MEAN WHAT ARE YOU DOING?

OH, I'M LOOKING AT THIS NEW GIFT THAT HERA GAVE ME! TS REALLY COOL!

WHAT IS IT?



IT'S A MODEL OF THE WORLD... I USE IT TO CONTROL EVERYTHING!

REALLY? HOW DOES IT WORK?!

SIMPLE. I MOVE THE PIECES AROUND AND THEN IT HAPPENS ON THE EARTH.... YOU CAN SEE IT HAPPEN BY LOOKING INTO THE MAGIC MIRROR OVER THERE!

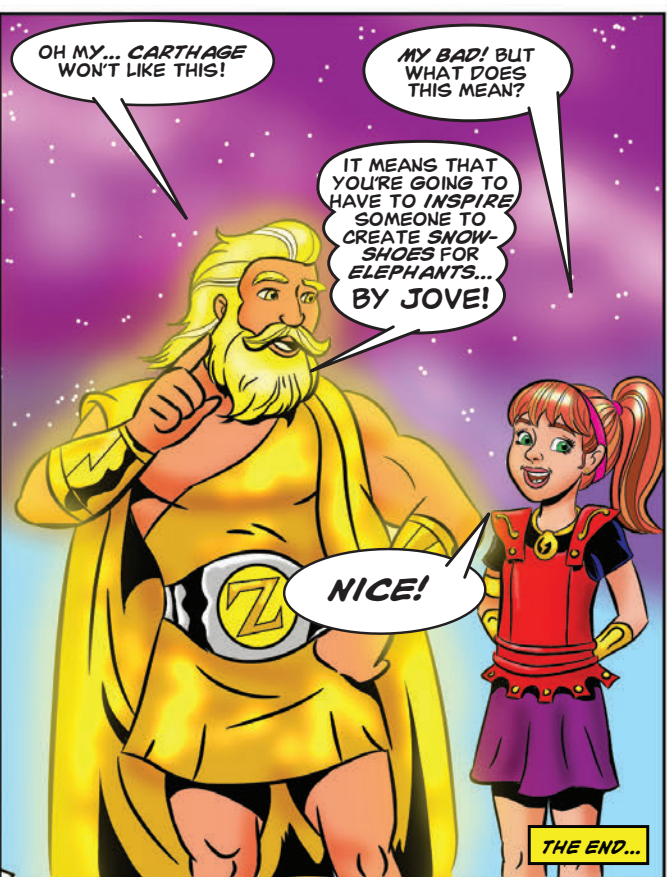
WOW! IT'S BETTER THAN A VIDEO GAME!

I DON'T KNOW WHAT THAT IS, BUT RIGHT NOW, I'M TRYING TO FIGURE OUT WHAT TO DO WITH THESE ROMANS... THEY'RE A PESKY BUNCH... THEY KEEP EXPANDING AND TAKING OVER OTHER CULTURES... THEY'VE EVEN RENAMED THE GODS... THEY CALL HERA, JUNO, AND ME, JOVE OR JUPITER! BUT THEY ARE REALLY GREAT BUILDERS AND WARRIORS!



OOOOPS!

CAREFUL, CALLIOPE! YOU JUST PLUNKED MOST OF THE ROMAN ARMY AND NAVY INTO NORTH AFRICA!



OH MY... CARTHAGE WON'T LIKE THIS!

MY BAD! BUT WHAT DOES THIS MEAN?

IT MEANS THAT YOU'RE GOING TO HAVE TO INSPIRE SOMEONE TO CREATE SNOW-SHOES FOR ELEPHANTS... BY JOVE!

NICE!

THE END...

# A Royal City

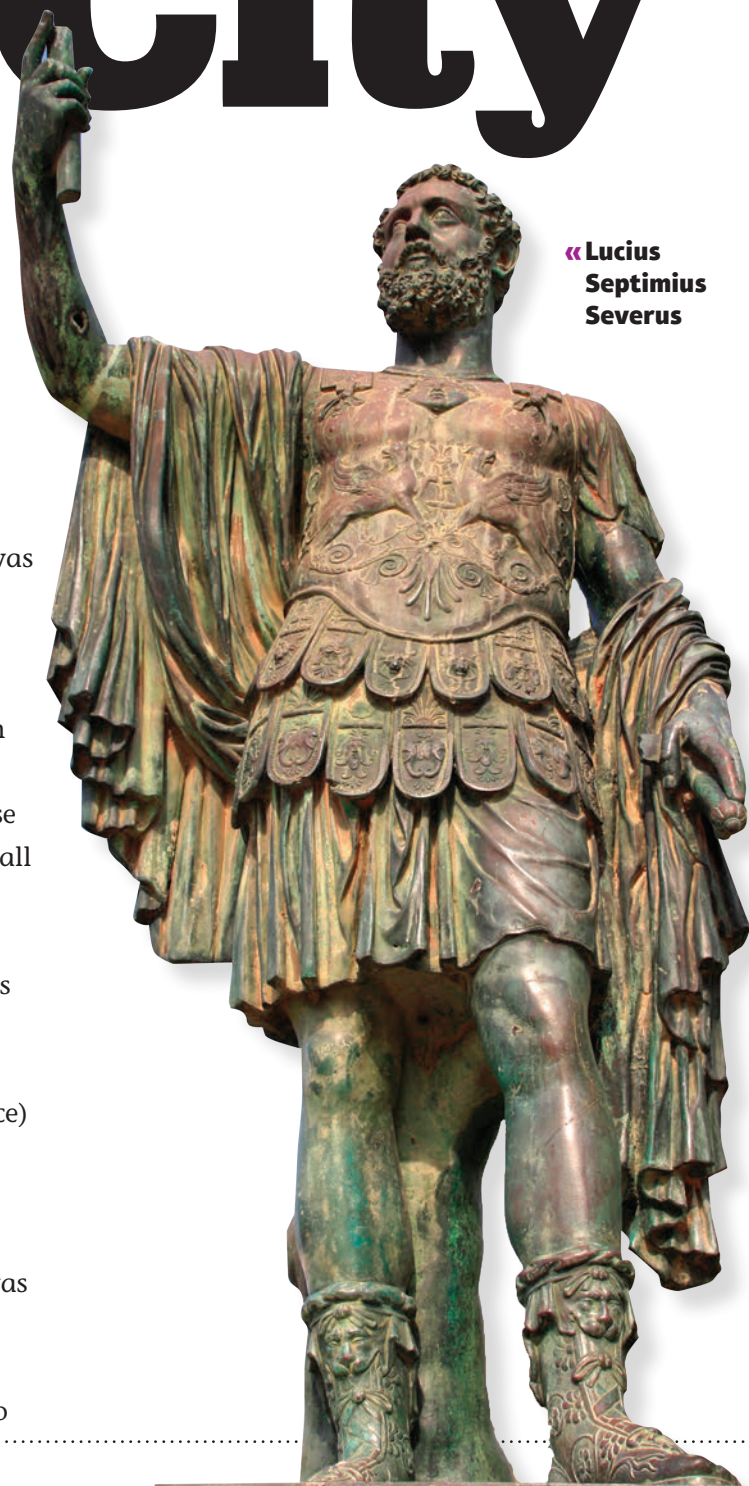
by Angela Murock Hussein

**I**t was the year A.D. 193, and Rome had a new emperor. There had been many before him, but he was the first North African. Other emperors had been born beyond the boundaries of Rome, but not one had ever been African. The new emperor's name was Lucius Septimius Severus, and he was a general from the city of Leptis Magna.

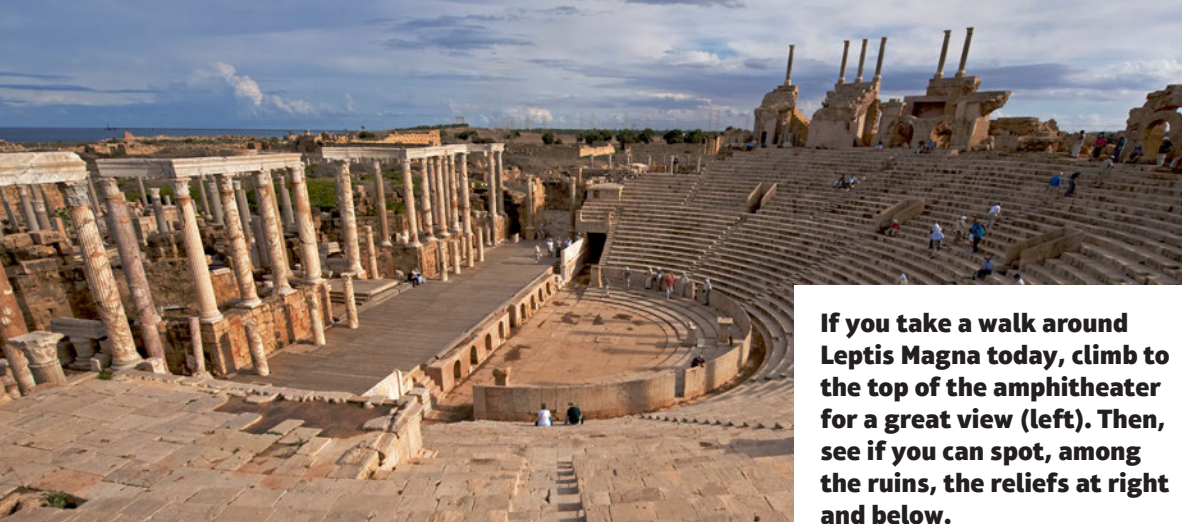
## **Meet Severus**

Severus had been born on April 11, 146, to a middle class family. In the late 160s, when he was in his early 20s, he immigrated to Rome, where he planned to pursue a career in public service. Under the emperor Marcus Aurelius, he held several of the traditional state offices, serving in such fields as law, administration, and finance. He also served as a public official in such diverse places as southern Spain, Sardinia, and Syria—all in addition to posts in his home province of Africa. When Marcus Aurelius died in A.D. 180, Severus went to Athens to study. Such travel was a common practice among wealthy Roman citizens at the time. Soon after, he was named governor of a region in Gaul (present-day France) and then Sicily.

Severus' next post was the governorship of Pannonia in Eastern Europe. While there, the Emperor Commodus was murdered. The year was 192, and the Roman Senate quickly chose Pertinax as the new emperor. Not everyone approved the choice, and just three months into



« Lucius  
Septimius  
Severus



**If you take a walk around Leptis Magna today, climb to the top of the amphitheater for a great view (left). Then, see if you can spot, among the ruins, the reliefs at right and below.**



his reign, he was assassinated by disgruntled **Praetorians**. At the time, Severus had control of the three legions stationed in the province where he was serving as governor. After hearing the news from Rome, he convinced his troops to support him in a bid for the imperial office. Two other governors did the same with their troops. But it was Severus who arrived in Rome first. The year was 193.

### **In Command**

Severus was proclaimed emperor, and he acted quickly to consolidate support among the Praetorians and the Senate. He then left Rome to defeat rivals elsewhere. It would be four years before he returned. When he did, he turned his attention to making sure that he would have a lasting legacy. To honor the city of his birth, he ordered civic improvements that would make it one of the most spectacular cities of the empire.

But Severus was not the first emperor to beautify Leptis Magna. His predecessors had commissioned public buildings as well. They, too, recognized the importance of the area's many resources to the empire. They also believed that introducing every province to Roman culture would help to unify the vast empire with its many diverse peoples and languages. About 80 years earlier, the emperor Trajan had built a circus or chariot-racing course so that the citizens of Leptis Magna could enjoy traditional, Roman-style entertainment. Trajan's successor, Hadrian, had

done much the same. Since bathing and athletics played a major role in Roman daily life, Hadrian had a large bath complex and gymnasium (part school, part gym) constructed.

### **A Grand Place**

The people of Leptis Magna honored their rulers, as well as the imperial families, in the Temple of Rome and Augustus. Arches were built by local officials and governors to honor emperors such as Trajan.

Soon after Septimius Severus became emperor, Leptis Magna became the third most-important city in Africa, rivaling Carthage and Alexandria in its wealth. In 205, the imperial family visited the city, and a unique arch was erected to honor the visit.

---

**Angela Murock Hussein** is an archaeological consultant and assistant director of the Mochlos Excavations in East Crete.

by Sarah Novak

# TROUBLED *from the North*



Geiseric, the king of the Vandals, saw his chance. He had spent years fighting to settle his people in Spain, but now he was looking across the waters of the

Mediterranean Sea to the Roman provinces of North Africa. Reports had reached him about prosperous cities, busy ports, and lands abundant with wheat and olives. Geiseric had also learned that the Roman Empire's military forces in North Africa were weakened because of continuing turbulence throughout the rest of the empire's vast and unruly lands. In addition, those in command in both Rome and Constantinople (the capital of the Eastern Roman Empire, now Istanbul in Turkey) were distracted by political intrigue.

So it happened that, in A.D. 429, tens of thousands of Vandal people—historians are not sure exactly how many—crossed from southern Spain to the North African coast. This was not the first time the Vandals had mass-migrated. Rather, their journey had begun centuries earlier.

## → A Look Back

Vandal tribes, along with other migrating groups, had first appeared on the far borders of the

Roman Empire's European lands in the second century A.D. To the Romans, these peoples from the north and east were all "barbarians." Their war bands were not particularly numerous or organized, but they did manage to make their way through Gaul (present-day France) and into Spain. As they did so, they were in constant conflict with Roman troops, other migrating tribes, and the inhabitants of the lands they passed through.

## → And the Prize Is—

Once in North Africa, Geiseric and his Vandal army raided eastward and besieged the important city of Hippo Regius. Boniface, the Roman governor in Africa, tried to negotiate. When that did not work, he resorted to military force. But that approach also failed. In fact, Boniface was unable to stop the Vandal advance, even after Constantinople sent him reinforcements. Finally, in 435, a peace treaty was signed that granted the Vandals land in Roman Africa. All was quieter for a while, but Geiseric wanted a bigger prize—Carthage.

In 439, Geiseric seized Carthage and made it his capital. Just three years later, Valentinian III, the ruler of the Western Roman Empire, was forced to yield more territory and control to the invaders.



# E rth

## DID YOU KNOW?

Centuries after Vandal rule came to an end, these invaders were remembered in France. The year was 1794, the time of the French Revolution. A French bishop was complaining about the destruction of artwork, calling it *Vandalisme* ("the work of Vandals"). The term soon entered the French language. It then was adapted into English as "vandalism." By definition, it means "intentionally destroying or damaging property, public or private."



Is this how you would picture the Vandals ransacking Rome? The 19th-century artist definitely has taken liberties, but the "horns" or "wings" on Geiseric's helmet (he is the figure on horseback) may be correct. Winged helmets were one way 19th-century illustrations denoted barbarians.

The Vandals also took control of the shipping fleets of Carthage. For the Roman Empire, this was disastrous, as the takeover ended the transport of *annona*—taxes, in the form of grain and olive oil, that the city had been paying to Rome. However,

archaeological evidence and chronicles show that, in many ways, life in North Africa under the Vandals went on much the same as it had before. Cities and farms continued to produce goods that were traded throughout the Mediterranean. Some Vandals adopted Roman customs, enjoying lavish banquets, fine clothing, entertainment at amphitheaters, and even baths.

### → Piracy and Politics

With Carthage as a base, the Vandals dominated the western Mediterranean, expanding their kingdom to Sicily, Sardinia, Corsica, the Balearic islands off Spain, and lands along the African coast that Rome had once controlled. Vandal piracy and plunder became feared. Yet Geiseric also tried to win power through diplomacy. He arranged an alliance with the Roman Empire's ruling family, promising his son Huneric in marriage to Eudocia, the five-year-old daughter of Emperor Valentinian. When Valentinian was assassinated in 455, this marriage agreement was disregarded by the new emperor. Geiseric responded with an intimidating show of force: an attack on the heart of the western empire—Rome itself.

### → The Sack of Rome

According to some accounts, Pope Leo met the Vandals at the gates of Rome's defensive wall and



**A close look at this hunter's clothes shows that he is a high-class Vandal. The mosaic was uncovered in Carthage and dates to the fifth century A.D.**

begged them not to harm the people or destroy the city. Although the Vandals did refrain from widespread destruction, for 14 days they plundered the treasures of Rome and brought them back to Carthage, including the princess Eudocia. She and Huneric eventually did marry, and they had a son named Hilderic, who served as ruler of the Vandals from 523 to 530.

Years of battles and talks followed. Finally, in 476, the eastern Roman emperor Zeno accepted Geiseric as ruler of the North African provinces and western Mediterranean islands. In turn, Geiseric was charged with ending Vandal raids and the persecution of North African Catholics.

Geiseric's successors increasingly turned their attention to conflicts within their own borders. They were forced to do so as tribal groups in North Africa sought independence.

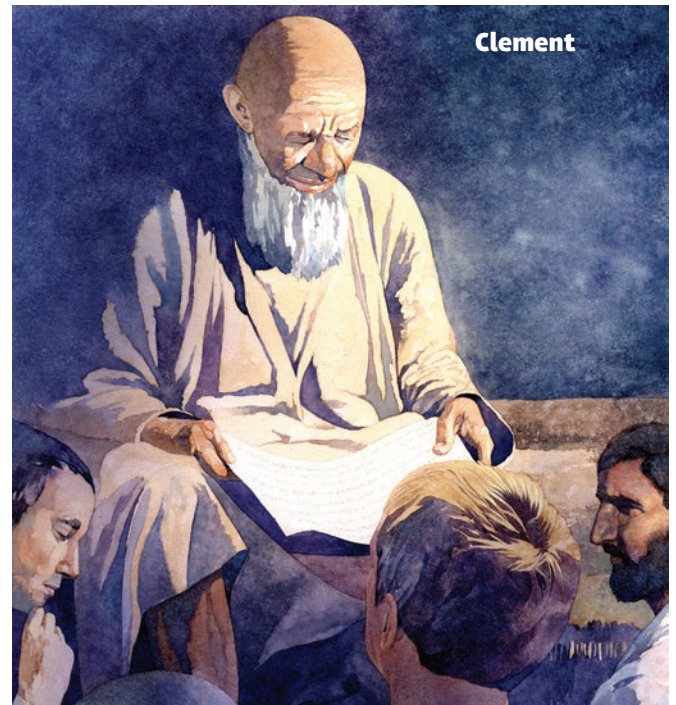
### → Almost 100

After Justinian was crowned Eastern Roman emperor in 527, he resolved to win back the lands bordering the Mediterranean Sea that the empire had lost. He saw his chance to enter the fray when his friend, the Vandal king Hilderic, was deposed by his cousin Gelimer. After Eastern empire forces defeated Gelimer's army in 533 and took back their Mediterranean territories, 99 years of Vandal rule came to an end.

# The Christian Connection

by Anthony Hollingsworth

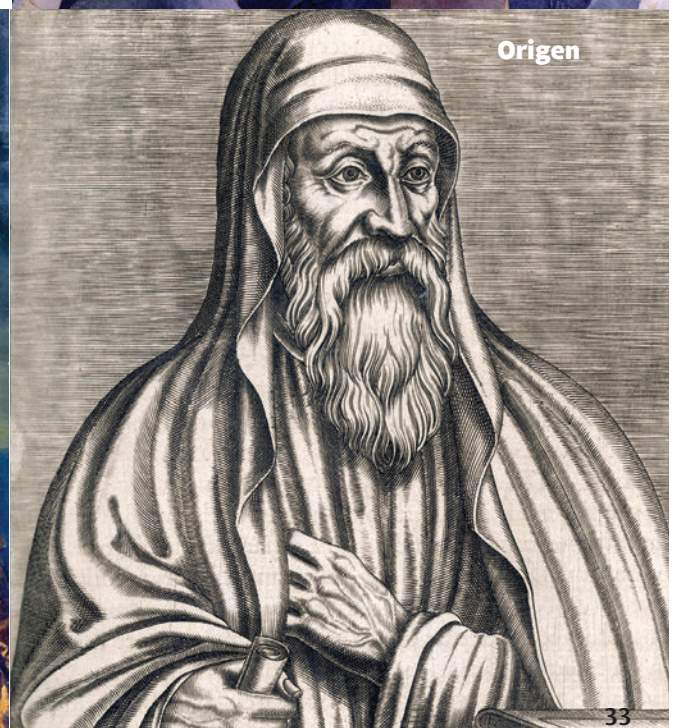
**H**ave you heard of Tertullian, Clement of Alexandria, Origen, or Augustine? All four were men who lived during the time of the Roman Empire—more than 1,800 years ago—and all four called North Africa home. Not one was an emperor, general, architect, or artist. Instead, each was a Christian philosopher. None of them conquered invading armies or built monuments, but their accomplishments influenced us more than any ancient battle, building, or statue. They were leaders of a new religion called Christianity, which had spread like wildfire across the Middle East, Europe, and finally, Africa.



Clement



St. Augustine



Origen

### Tradition Turns to...

When we think about the first Christian leaders, few of us think immediately of people in North Africa. Most of us think of Rome and Jerusalem, the first hotbeds of Christianity. Jerusalem—far off in the Middle East—was the city where Jesus, who is credited with founding Christianity, was put to death. Rome, on the other hand, was the ideal location for Christians to establish their own headquarters, as it was the capital of the Roman Empire. North Africa became important to Christianity only in the second century A.D., a hundred or more years after Jesus' death.

### The Earliest Were...

Most early Christians were poor people who followed the teachings of the first followers of Jesus. They rarely questioned the stories or analyzed the teachings. For the most part, these Christians were not well educated. Over time, however, Christianity grew in popularity and gradually became a threat to the **pagan** religions of the Empire. Upper class society—educated, pagan Romans—began thinking more and more about Christianity. Many dismissed it as a religion for the poor or laughed at its customs and beliefs. Many emperors had Christians arrested and executed.

### And Changes Came...

There were some educated and wealthy pagans who converted to Christianity, raised their children as Christians, and began defending their new faith. They tirelessly explained how Christianity was better than worshiping the ancient Greek and Roman gods, or Egyptian gods such as Isis, or the Persian bull god Mithras. In time, Christianity changed from a religion of the poor and working class to a religion for the

---

**Pagan refers generally to the polytheistic religions of the ancients, especially of Greece and Rome, and to the people who followed them.**



educated and wealthy. It provided answers that the pagan religions were unable to offer.

### Meet the Four...

*Tertullian*, the first great North African Christian, was from Carthage. He has been called the “father of Latin Christianity.” North African wealth had made Carthage a center of education, and Tertullian was an example of the well-educated Roman. He was the first man to study the Christian stories and think of God as a Trinity or three persons—God the father, Jesus the son, and the Holy Spirit.

*Clement* lived at about the same time as Tertullian, between A.D. 150 and 215. Living farther east, in the Egyptian city of Alexandria, Clement had grown up pagan and studied philosophy. After he converted to Christianity, he then began teaching others that Christianity was the next step after Greek philosophy and that the Greek myths were untrue.

*Origen* was born about 30 years after Clement. He was known as one of the first scholars to write a Christian interpretation of the **Old Testament**.

*Augustine*, who lived more than a century later, showed the world that Greek philosophy helps us understand Christianity.

These four men—all from North Africa—were instrumental in converting a pagan world to a Christian world. They were also key in shaping the Christianity people practice today.

---

**Old Testament is the first part of the Christian Bible and corresponds to the Hebrew Scriptures.**

# Mussolini's Vision for Africa

by Carolyn Fluehr-Lobban

**W**hen Benito Mussolini became Prime Minister of Italy in 1922, he introduced **fascism** to stave off growing support for **socialism**. In 1935–36, he invaded Africa. Aware that most of the continent had already been colonized by European powers, he sought to control the remaining, unoccupied areas. He seized Ethiopia, Eritrea, part of Somaliland, and Libya. This occupation brought fame to the Italian dictator and a feeling among many Italians of a return to grandeur for their country—a grandeur that had been known when the ancient Roman Empire controlled much of this newly conquered territory. And, like the Romans centuries earlier, Mussolini saw his conquests as part of a military strategy to control shipping in the Mediterranean and Red seas.

## Two Sides—Two Viewpoints

The Ethiopians, however, were determined not to relinquish their independence easily. As a result, the country soon became a symbol of freedom in Africa and among Africans in the Americas for its role in trying to counter imperialism. Years earlier, in 1895, Ethiopians had repelled an Italian attack on their land. They now sought to do so again. For the Italians who saw the invasion as a “return to rule,” their joy would last only a few years.

Ethiopia’s ruler, Haile Selassie, won fame for his defiant stand against Mussolini and for his



This political cartoon ran in a French newspaper in 1936. If you had to add text for Mussolini, what would it say? And, for Haile Selassie?

international efforts to liberate Ethiopia. In May 1936, he appealed for help, though unsuccessfully at the time, to the League of Nations in Switzerland. In 1941, British forces, aided by local guerrillas, invaded Ethiopia from Sudan and Kenya. Five years to the day after its fall to Mussolini, they recaptured the kingdom and its capital Addis Ababa. Now weakened, the Italian dictator allied himself and his country with Adolph Hitler and Nazi Germany, a decision that would destroy both him and any dreams of a new Italian era of empire.

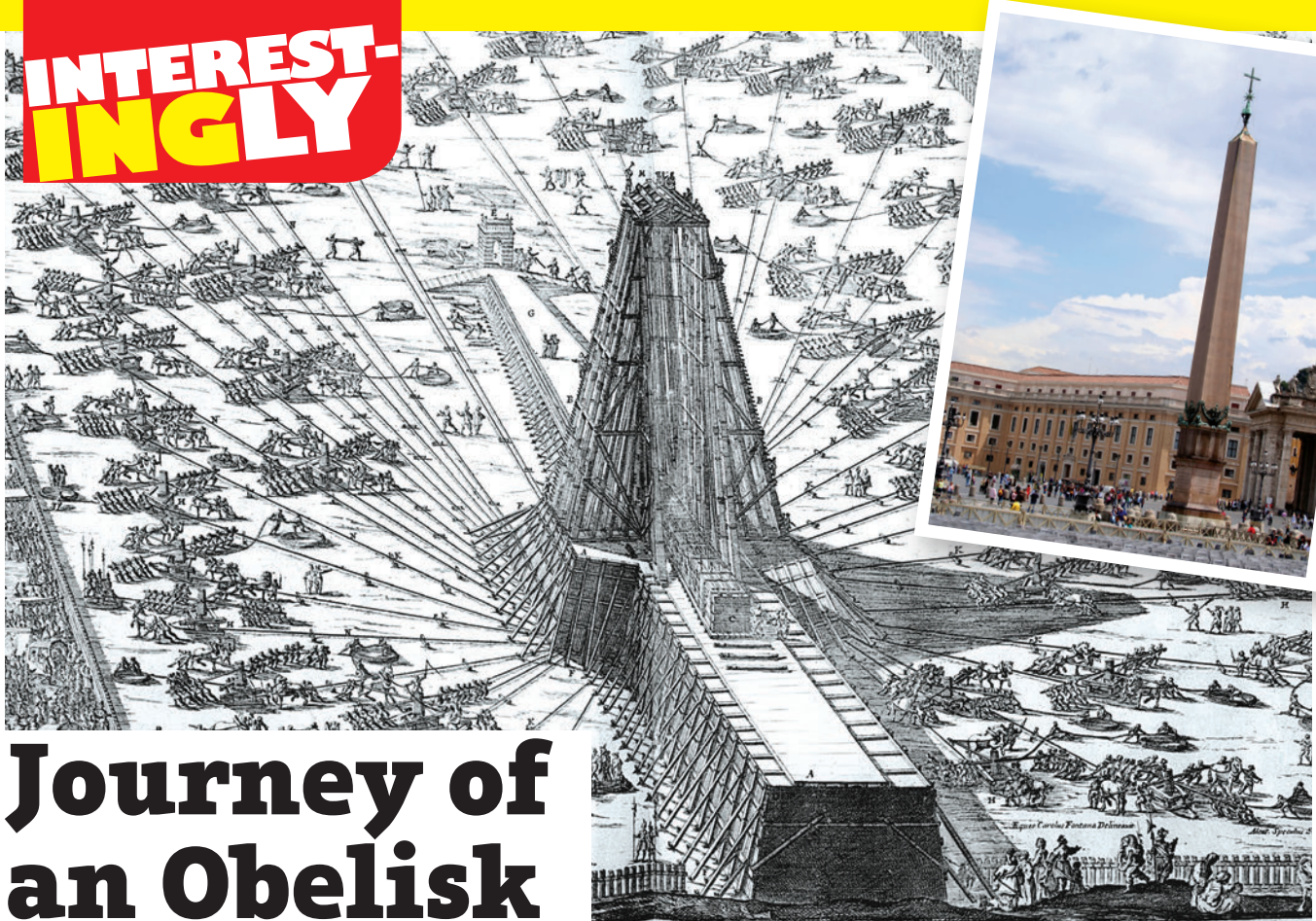
## And Today

In 1963, Addis Ababa became home to the Organization of African Unity (OAU). The group had formed after the African Independence Movements of the 1950s and 1960s led to decolonization throughout much of Africa. In 2002, the OAU was replaced by what is known today as the African Union (AU).

*Carolyn Fluehr-Lobban is professor emerita of anthropology at Rhode Island College and adjunct professor of African Studies at the Naval War College.*

**Fascism** refers to a way of organizing a society so that the government is ruled by a dictator who controls the lives of the people, who are not allowed to disagree with the government.

**Socialism** refers to a way of organizing society so that major industries are owned and controlled by the government rather than by individual people and companies.



# Journey of an Obelisk

by Sarah Novak

**T**o move this ancient 83-foot solid granite obelisk to where it stands today in Rome, 75 horses, 5 levers, 40 windlasses, and 907 workers were required. The year was 1586, and the distance was 260 yards. But the obelisk’s journey actually began more than 4,000 years ago.

An obelisk is a tall, tapered pillar with a pyramid shape on top. This obelisk originally commemorated an Egyptian pharaoh of the Fifth Dynasty (about 2494 to 2345 B.C.) in Heliopolis, or “City of the Sun,” now part of Cairo. Soon after Egypt became a province of Rome, Augustus, the first Roman emperor, had this obelisk moved to Alexandria, to honor his predecessor, Julius Caesar. In A.D. 37, Caligula, the third Roman emperor, brought the obelisk to Rome on an enormous barge and installed it in the center of a large arena.

There the obelisk stood, for centuries, as Rome changed around it. In the fourth century, a church was built next to it and named for the **apostle** Peter. (According to tradition, he had died and was buried on that site.) When a larger St. Peter’s church was under construction in the 16th century, the obelisk was moved to line up with the new building’s imposing facade.

First, a tower of wooden scaffolding was built around the obelisk, so ropes and windlasses (a type of winch) could lower it onto its side on a long platform. Then, it was rolled to the new site, under the reconstructed scaffold. Finally, at the signal of a trumpet and with much creaking and straining of ropes, the obelisk was raised to its final location. **(SEE ILLUSTRATION ABOVE.)**

**Interestingly**, eight ancient Egyptian obelisks can be seen in Rome today. But only the one in front of St. Peter’s (see inset above) has remained intact and standing since classical times, except for its repositioning in 1586.

.....  
**Sarah Novak** is a writer who specializes in historical byways and curiosities.

# WHAT'S WRONG HERE?



**QUEEN CLEOPATRA** of Egypt, in a splendid gold dress, is poised to drop a valuable pearl from her earring into a glass of vinegar. The Roman general Mark Antony, in a brilliant red cloak, looks on skeptically. This 18th-century painting, *The Banquet of Cleopatra* by Italian artist Giovanni Battista Tiepolo, depicts a scene from the story of a contest between Cleopatra and Mark Antony to see who could offer the most expensive feast. Cleopatra won, the story goes, when her pearl dissolved in the vinegar and she drank it. But what's wrong here? Would Cleopatra really have looked like this?

See page 41 for the answer.

# ASK AWAY!

Have a question about world history, archaeology, paleontology? Dr. Dig and Calliope are ready to answer your questions.

**Q** What is the oldest item you have ever found?

—Emily Nowak, Web post

**A** MOST LIKELY the artifacts I uncovered while digging in Giza are the oldest finds I have ever made. They were well more than 4,000 years old. I am not sure which one find was the oldest, though. We uncovered pottery, blocks with hieroglyphic writing on them, tools, and offering equipment. Many archaeologists, however, do dig up items that are much older. For example, a friend of mine works in Olduvai Gorge in Africa, where she finds artifacts and bones that are up to two million years old.

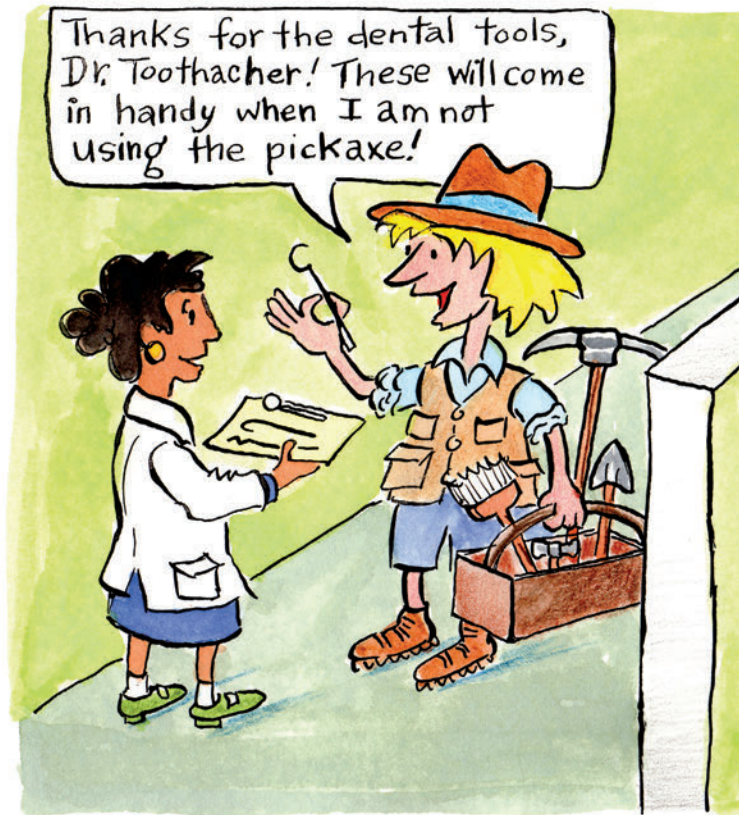
—Dr. Dig



**Q** What inspired you to become an archaeologist?

—Ava Shuman-Messplay, Web post

**A** ACTUALLY, SEVERAL things inspired me to become interested in archaeology. Growing up, I liked museums, such as the Carnegie Museum in Pittsburgh. It had ancient collections that made me curious about the past.



I watched a lot of documentaries about archaeologists that made me want to discover ancient artifacts like they did. When I was 10, we studied ancient Egypt in school, which led me to read as much as I could about it. It was not until I was older that I decided to become an archaeologist, but what inspired me to make the decision was the fact that I had always loved the subject and felt that it was something I would always enjoy doing.

—Dr. Dig



**Q** What's the best artifact you have ever found?

—Elijah, Web post

**A** WELL—POSSIBLY a stone mold for a bronze tool. It was in perfect condition and had probably never been used. It was interesting because you could see

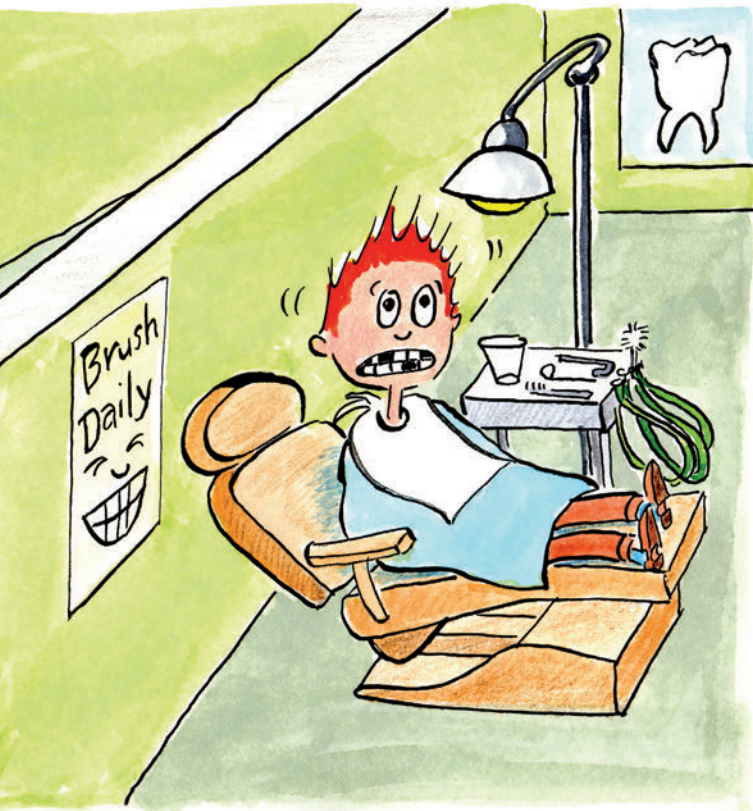




**WRITE US!**

dig@cricketmedia.com

CALLIOPE/DR.DIG,  
70 East Lake Street, Suite 800,  
Chicago, IL 60601



When we get down to layers where there are floors or where features must be defined, we will use smaller digging tools, such as trowels. When something delicate is found, it must be uncovered carefully. To do so, we often use brushes and dental tools. There are procedures for removing delicate artifacts from the soil. For example, we might consolidate these finds with gauze and plaster to make casts that will keep all in place while they are on their way to the lab.

—Dr. Dig



exactly how it was made and how it would work, with a channel at one end for pouring molten metal into the trapezoid-shaped mold where the metal would cool. I was on my second excavation ever, so I was very proud to have found something special. I really enjoy objects that make me think about the people who made and used them, but who lived so long ago.

—Dr. Dig



**Q** **What tools do you use when you or your team find an object like a bone? How long did you have to go to college to be an archaeologist?**

—Ethan Bergmann, Web post

**A** THE TOOLS we use depend on the job. For digging thick layers of earth, pickaxes, shovels, and buckets are used.

**Q** **What is the biggest of your finds?**

—Aidan A., Web post

**A** THE LARGEST find that I have ever uncovered was a tomb cut into the rock at Giza. It had been covered in sand, and I will never forget how surprised I was when the workmen moved sand and found the corner of a doorway. We hadn't realized that anything was there. We were trying to clean sand down to the ground level to understand the area of the cemetery. We cleared it out to find a chapel room and a burial chamber with the bones of the tomb occupant still inside.

—Dr. Dig





## Contest Winner!

Congratulations to Hailey Jones in Georgia with her winning word—alesology, which means the “study of planes.” Hailey combined the ending “ology” (“the study of”) with the Latin word *ales* (“winged” or “swift”).

## ‘Eagle Eye’ Winner!

Congratulations to Matthew Berger in Georgia, the winner of the May/June 2015 Eagle Eye Contest. The “eagle eyes” were on pages 21, 33, 39, and 46.

## War to End All Wars!

Here’s a letter from Charlie B., a fourth-grade student at the Bernice A. Ray School in Hanover, New Hampshire—

In the article “The War To End All Wars,” in your May/June 2011 edition “30 Events That Changed the World,” I learned how World War I began.

It started with the murder of the Archduke Franz Ferdinand and his wife Sophie of Austria. I learned that they were killed by a Serbian assassin named Gavrilo Princip. He was a member of the Black Hand. After the murder, Austria declared war on Serbia. Russia and Serbia were allies, so they fought together against Austria. Then many other countries got involved, until the whole world was at war, all because of a single man’s crime... Maybe we can prevent another world war by not overreacting to one person or one group’s bad actions. I enjoyed reading CALLIOPE and hope to read another issue soon.

## Joke

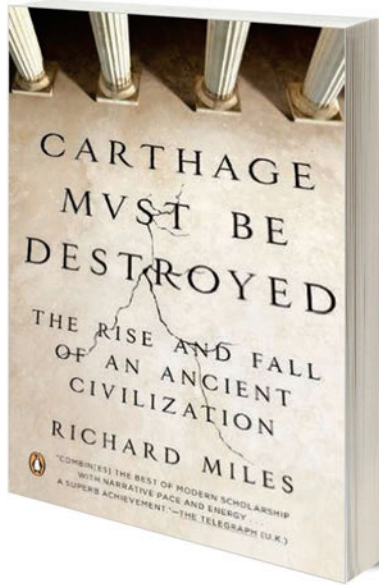
Q: What building has the most stories?

A: ...the library!



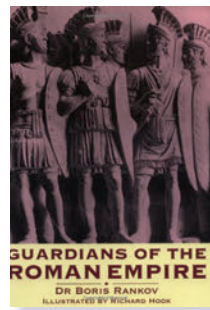
Thanks, Charlie, for your letter. For an overview of what caused WWI, click on: [www.bbc.co.uk/bitesize/ks3/history/20th\\_century/first\\_world\\_war/revision/3/](http://www.bbc.co.uk/bitesize/ks3/history/20th_century/first_world_war/revision/3/)

# OFF THE SHELF

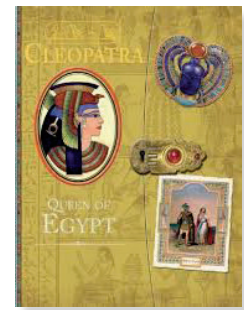


## Headline Here

**Carthage Must Be Destroyed: The Rise and Fall of an Ancient Civilization** by Richard Miles (Penguin, 2010, [www.penguin.com](http://www.penguin.com)) is a good read for anyone seriously interested in the history of the ancient city, its civilization, and its death struggle with Rome. Well researched, it interweaves the accounts of the ancient historians Polybius, Livy, and others with analysis of excavated finds in a way that brings the death struggle vividly alive.



[ BOOK ] **Guardians of the Roman Empire** by Dr. Boris Rankov (Osprey, 1994, [www.ospreypublishing.com](http://www.ospreypublishing.com)) is another in Osprey's excellent military series and focuses on the Praetorian Guard. Maps and photos complement the well-researched text and also a series of wonderfully detailed illustrations of Guard members and the Roman senators they served.



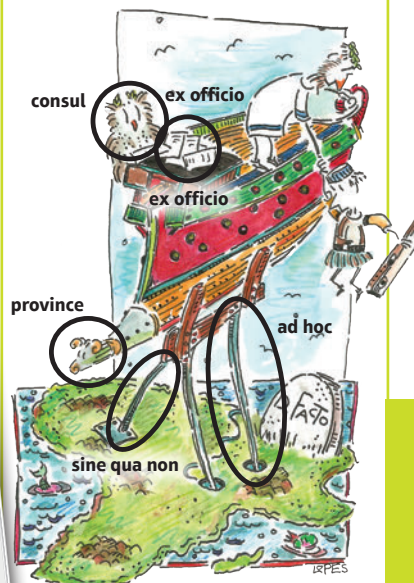
[ BOOK ] **Cleopatra** by Clint Twist (Candlewick Press, 2012, [www.candlewick.com](http://www.candlewick.com)) introduces readers in an informative and engaging manner not just to this fascinating Egyptian but also to the times in which she lived—with fold-out maps and essays and a great variety of illustrations. Enjoy!

## Cricket Resources

- [The Lion that Was Rome](#) (DIG0901)
- [Africa's Jewel, Leptis Magna](#) (DIG0802)
- [Heroes of Early Rome](#) (CAL0712)
- [Rome's Master Builders](#) (CAL0511)
- [Cleopatra](#) (CAL0411)
- [The Roman Republic](#) (CAL0210)
- [The Fall of Rome](#) (CAL0101)
- [Hadrian, Roman Emperor](#) (CAL9912)

## Answers

FUN WITH WORDS, page 20:



WHAT'S WRONG HERE, PAGE 37: Although Cleopatra was legendary for her beauty and finery, no one is sure of her exact features. What is certain is that she would not have worn the clothing shown in Tiepolo's 1743–1744 painting. Tiepolo based Cleopatra's dress on European fashions from his time period and earlier. The collar of her dress, for example, is in a style that became popular in the 16th century.



This issue's EAGLE EYES are on pages: 2, 10, 46, and back cover.

# ON THE NET

- ➔ Click here for PBS' great program on the Roman Empire—with lots of links to related topics: [www.pbs.org/empires/romans/empire/](http://www.pbs.org/empires/romans/empire/)
- ➔ What's great about this site on Roman Africa is its link to great photos of archaeological sites in Carthage today: [www.oala.villanova.edu/hippo2/history.html](http://www.oala.villanova.edu/hippo2/history.html)
- ➔ An interesting site from New York's Metropolitan Museum of Art, which focuses on art from the provinces—well worth a visit: [www.metmuseum.org/toah/hd/gaul/hd\\_gaul.htm](http://www.metmuseum.org/toah/hd/gaul/hd_gaul.htm)



**2016**  
**5th Annual**  
**Global**

# **Invent It Challenge**



Think about a real  
world **health**  
problem and come  
up with a solution.

**Submit your  
invention by  
March 18, 2016.**

**No purchase necessary to win.**

**Learn more at: [Challenges.Epals.com/InventIt2016](http://Challenges.Epals.com/InventIt2016)**

**SPONSORS:**




Smithsonian

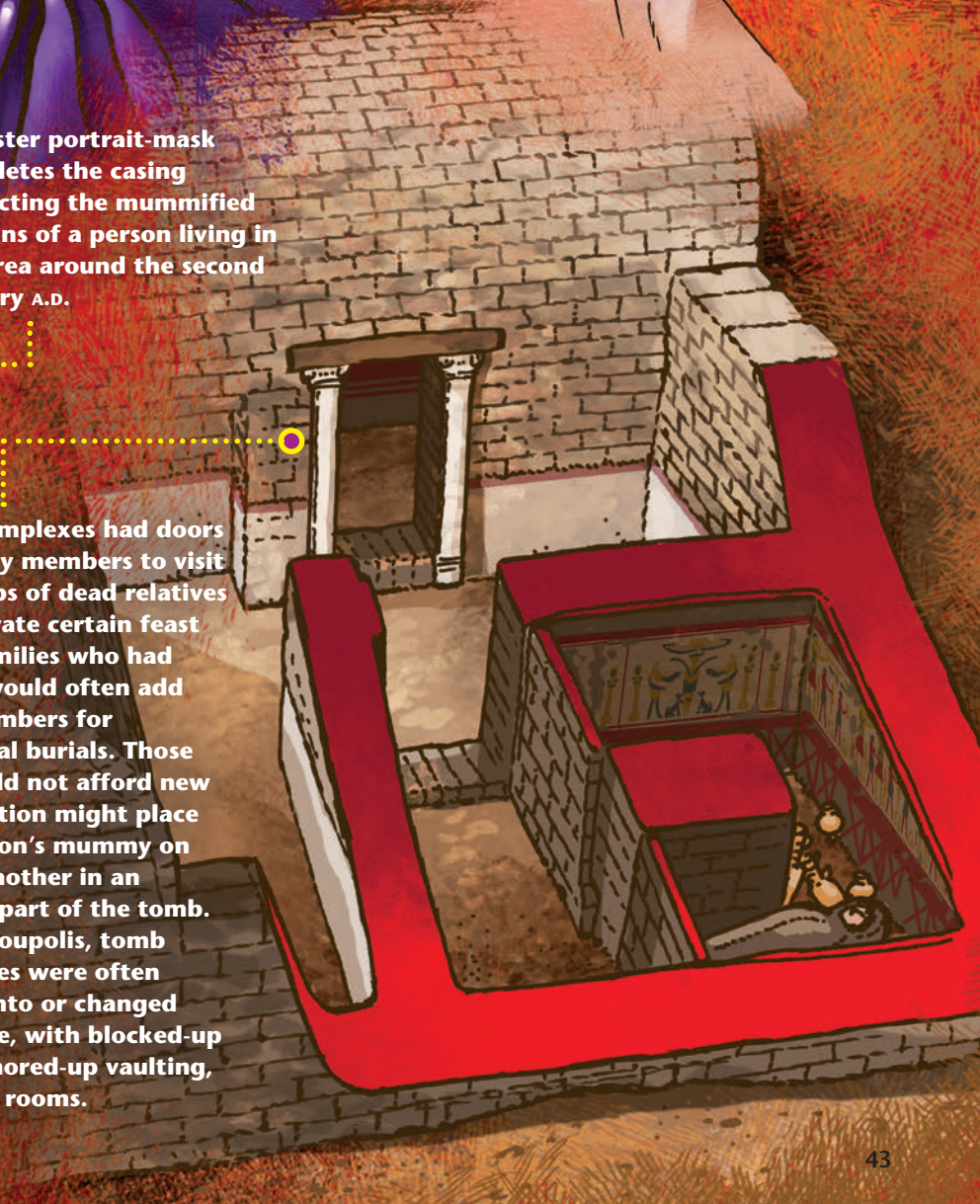


## Looking into the Past

Antinous (right) was dead, and the Roman emperor Hadrian (left) was determined to honor his memory. What better way than to build a magnificent, new city and name it Antinoupolis.



A plaster portrait-mask completes the casing protecting the mummified remains of a person living in the area around the second century A.D.



Tomb complexes had doors for family members to visit the tombs of dead relatives to celebrate certain feast days. Families who had money would often add new chambers for additional burials. Those who could not afford new construction might place one person's mummy on top of another in an existing part of the tomb. At Antinoupolis, tomb complexes were often added onto or changed over time, with blocked-up doors, shored-up vaulting, and new rooms.

# Let Me Introduce You...

by James B. Heidel

**A**ntinoupolis was a city in Egypt that the Romans built mostly from scratch in the A.D. 130s. The story of how it came to be is a fascinating one. Its ruins are located on the east bank of the Nile, about halfway between Cairo and Luxor. *Polis* is the ancient Greek word for “city,” so “Antinoupolis” means “City of Antinous.”

## Who Was He?

We know very little about Antinous, the young man for whom the city was named. He grew up on the south shore of the Black Sea in the Roman province of Bithynia in a city called Claudiopolis (present-day Bolu in Turkey). Antinous was Greek because at that time Turkey did not exist and Bithynia



**Antinous**  
{head of life-size marble statue found at Hadrian's villa in Italy}

was part of Greece (and part of the Roman Empire). While we know nothing about Antinous' family, it is certain that they had sufficient connections to be able to secure a position in the court of Emperor Hadrian.

## A Man 'About Town'

Hadrian, like all Roman emperors, had many important responsibilities. He headed the armed forces, decided important law cases, traveled the empire constantly to oversee the completion of important architecture projects, and settled disputes between various people around the empire. Unlike most Roman emperors, Hadrian wrote poetry and thought of himself as an architect. In fact, he personally argued points of



**At Antinoupolis, the once-majestic columns of the temple of Ramses II, a 19th Dynasty Egyptian ruler who died in 1213 B.C., lie in ruins, but their carvings still have lots to tell.**

**For more information about the history of Antinoupolis and work at the site, check out: [antinoupolis.net](http://antinoupolis.net)**

design with his staff of architects and engineers. In addition, he was keenly interested in the traditions and religions practiced throughout the empire. He investigated how local customs worked, embellished and built new temples, and even became a member of several religions.

Without a doubt, Hadrian was an A-type personality, who wanted to be everywhere at once and micro-manage Rome's enormous territory. This meant that he spent much time traveling. Most emperors spent the majority of their time in Rome, but during Hadrian's 21 years as emperor, he spent 11 years beyond Italy's borders, personally managing the empire. With him on these travels were large numbers of people and equipment. The towns and cities he visited were expected, as a matter of hospitality as well as to gain imperial favor, to supply food, accommodations, and entertainment for the traveling court. So it was probably during an imperial visit to Claudiopolis in A.D. 123 that Antinous met Hadrian and joined the imperial entourage.

### **From Claudiopolis to the World**

By today's standards, Antinous was young, but during the Roman period, when a boy reached puberty, his family had a ceremony for him, during which

the boy would officially change into the clothes Roman men wore. Thereafter, a boy—now a man—could enter into legal contracts and become the official head of his family if his father was dead. So, even as a young teenager, Antinous was considered an adult. When Hadrian's court left Claudiopolis, Antinous left with it and traveled the empire.

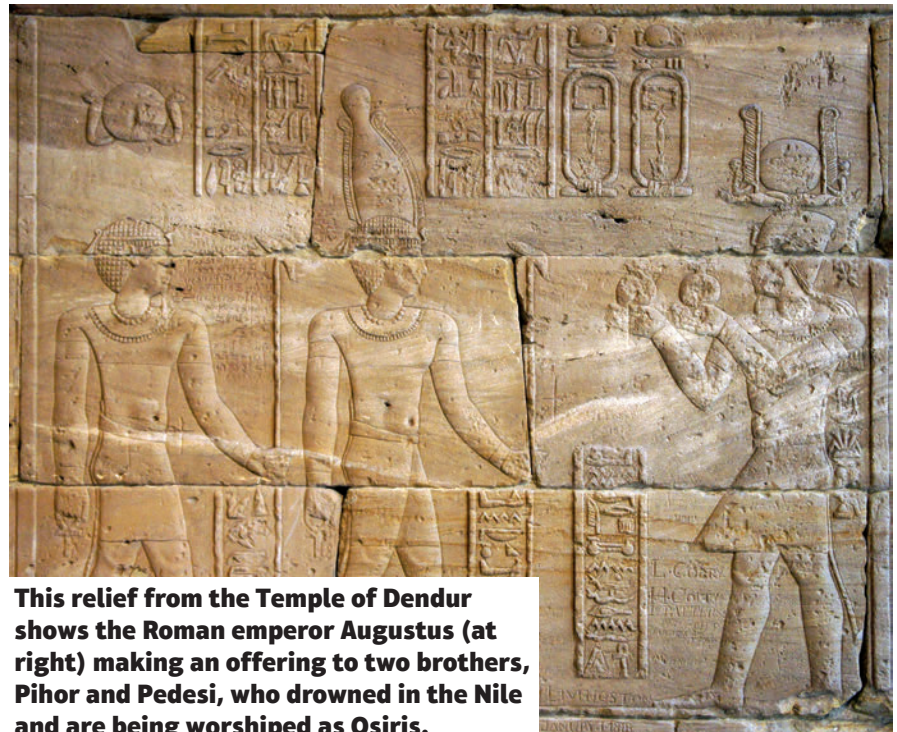
Certainly, this experience must have been very exciting for a young man from an out-of-the-way part of the world.

When Hadrian and Antinous

became very close is unclear, but tragedy struck in October of A.D. 130. During an imperial visit to Egypt, Antinous drowned in the Nile. Hadrian was grief-stricken! To make matters worse, it was not known—and still is not known—whether it was an accident, murder, or suicide. What Hadrian did know was that a memorial



**A team member works at excavating, cleaning, and recording the remains of a mummy uncovered in the family tomb excavation.**



**This relief from the Temple of Dendur shows the Roman emperor Augustus (at right) making an offering to two brothers, Pihor and Pedesi, who drowned in the Nile and are being worshiped as Osiris.**

# LET'S GO dig-GING

had to be built. There was precedence for this, and so Hadrian knew what he would do.

## And Honor Him, He Did!

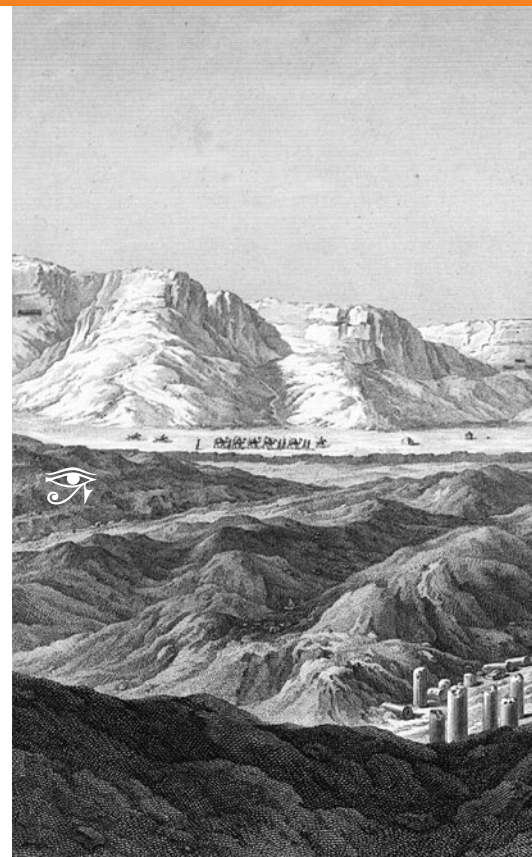
From his study of Egyptian religion, Hadrian knew that, since earliest Egyptian times, humans and animals that drowned in the Nile became Osiris, the god of the afterlife (SEE ALSO RELIEF PAGE 45 [BOTTOM]). There are other instances, even in the Roman period, of families who built chapels or small temples in honor of their drowned relatives and who worshiped these dead as Osiris. The difference with Hadrian was that he was an emperor and had a much larger budget at his disposal. This meant that he could build an entire city for the worship of Osir-Antinous. And, so, this is how Antinoupolis came to be.

Like many of Hadrian's building projects, Antinoupolis

In this column relief from the Temple of Esna to the south of Antinoupolis, Hadrian (right) makes an offering to Khnum, a creator god.



was enormous, elaborate, and well equipped. Its citizens were provided with everything that a proper Greco-Roman city needed: a large bath complex, a Greek-style theater, great shady colonnades for walking out of the sun, public markets, a huge hippodrome (horse racetrack), enormous city gates, an elaborate



commemorative arch visible from the river, and a harbor for ships. In addition, Hadrian built a new road, the Via Hadriana, that led from Antinoupolis all the way across the eastern Egyptian desert to the Red Sea. This “highway” was meant to facilitate trade with the regions far to the east and also, perhaps, to increase military control in the region.

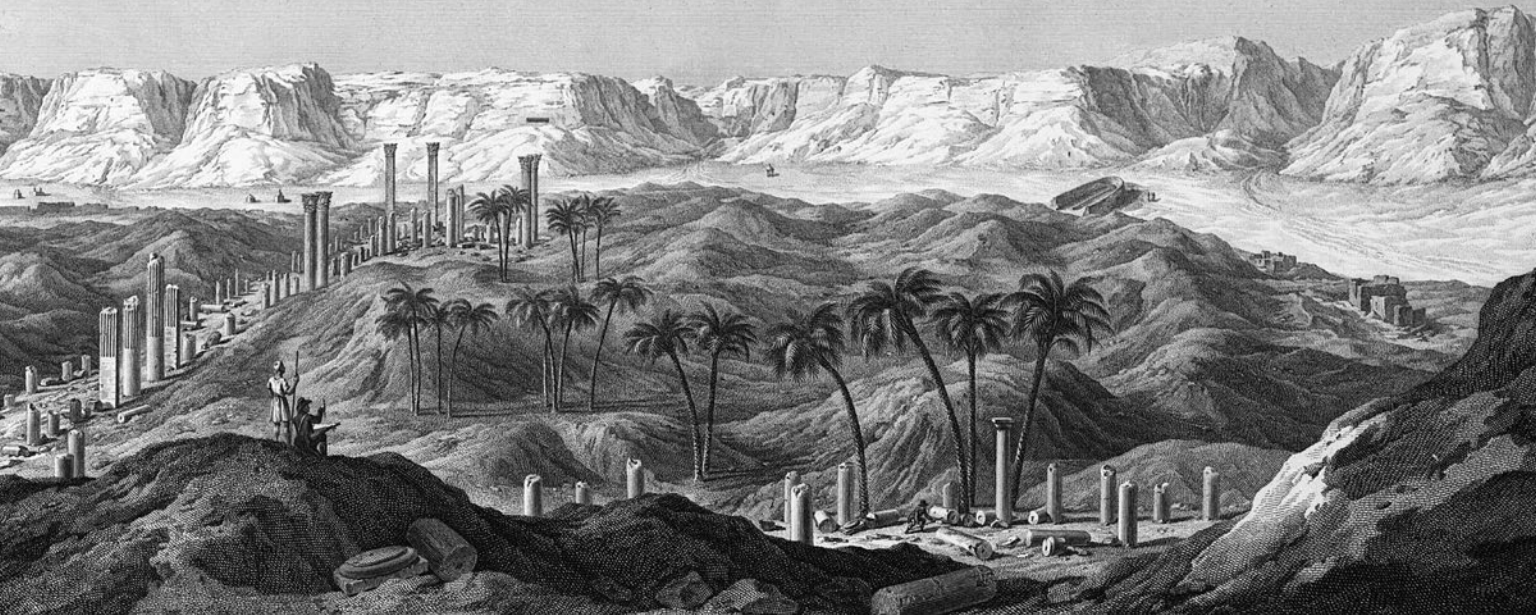
New laws were passed that were designed to draw settlers to Antinoupolis. Settlers were also lured into coming to the area with land grants and tax breaks for the land where they had been living. The city filled quickly, and its people were proud of their large, new, sparkling streets and buildings. In other areas of Egypt, many of the structures were now crumbling with age.



The workers here are excavating in the family tombs area at Antinoupolis.



This centuries-old illustration offers an overall view of the ruins at Antinoupolis.



### From Past to Present

Antinoupolis was one of the last massive building projects in Egypt to be associated with the ancient religious beliefs of the people. Already at the time of the city's founding, Christianity had begun to be practiced and was spreading throughout the country. In the fourth and fifth centuries A.D., the people of Antinoupolis built large churches on top of many of the old religious structures. In the centuries that followed, Antinoupolis continued to be an important city. Today, the site is mostly abandoned, with only a small Muslim village with modern buildings along the riverbank.

**James B. Heidel** is an architect and **epigraphic** artist for the University of Florence, Italy's archaeological mission to Antinoupolis, and for the Epigraphic Survey of the University of Chicago in Luxor, Egypt.

**Epigraphic** refers to the study of ancient inscriptions.



An aerial view of the hippodrome area at Antinoupolis. Just imagine the horse races that took place here—and the cheering crowds of spectators!



Can you see it? A good eye saw this corner edge of an Ionic column capital (top of a column) peaking above the ground level at Antinoupolis.

# Tombs of the First Settlers

by James B. Heidel

**H**ow can we learn more about the first settlers of Antinoupolis? What were they like, and what kind of life style did they have? A good way to learn about people, especially ancient Egyptians, is to excavate their settlements and look at their tombs.

Today, the site of Antinoupolis is bordered on the north and east by an enormous cemetery that contains literally thousands of burials deposited over hundreds of years. Early excavators at the site dug up the remains without being too careful about what bodies went with which possessions. Today, there are objects and mummies from Antinoupolis at museums throughout the world, and the dates on these are varied.

## A Change from the Past

In recent years, archaeologists working at Antinoupolis have been excavating selected tomb sites. Their goal is to learn more about the first inhabitants—the original settlers. By examining pottery and other remains scattered on the ground and by doing geophysical survey, they have been able to locate and excavate a group of tombs to the far north of the city, at the entrance to a wadi (a desert gully). The hope is that by careful study of the archaeological context, they will be able to provide better dates for



**Above: Don't you love the design? Lots of careful work has been done to reassemble the pieces of this painted pot found in a one-person tomb.**

**Top: Finds such as this plaster mummy mask from a family-tomb complex act as a personal link between our world and that at Antinoupolis.**



**Left: This leather sandal found in a family-tomb complex is really quite similar to those we wear today! Below: A team member holds two intact pots uncovered in a one-person tomb.**

the artifacts now in museums but excavated in the distant past.

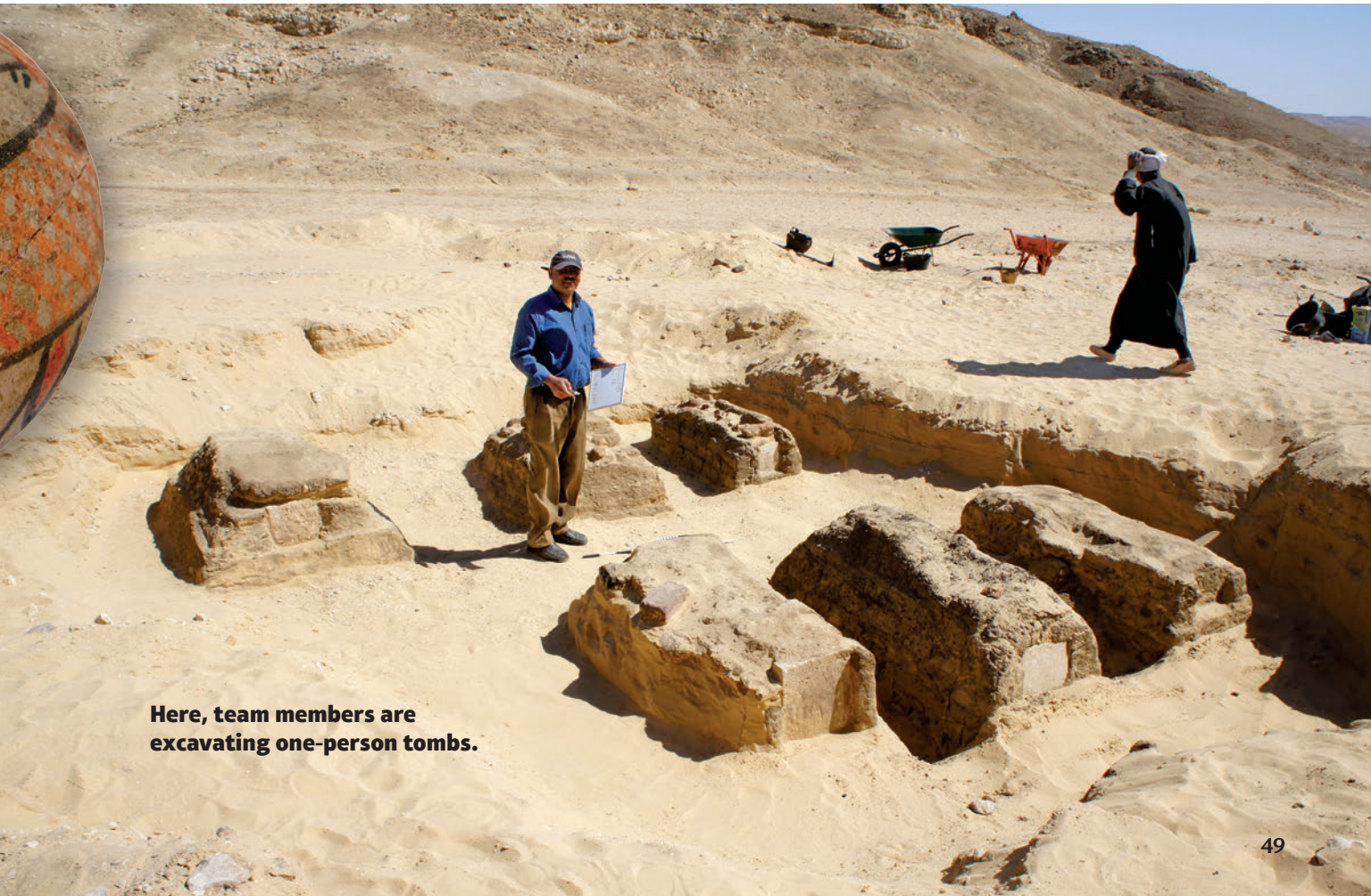
### **A Look—Big and Small**

Two types of tombs have been uncovered. One includes large buildings with many rooms for many generations of a family to be buried together in one location. The other is a small tomb that is just large enough to hold one person. As both types date to the same period, there must be another reason for the difference. A clue is in the contents: Only

pottery has been found in the single tombs, while pottery and expensive luxury goods made from bronze and iron, faience (glazed ceramic ware) and glass, and plaster and terra cotta (baked clay) have been found in the family complexes. The terra-cotta **votive** figurines and the plaster mummy masks are particularly impressive.

---

**Votive** means being offered or performed in fulfillment of a vow or in gratitude or devotion.



**Here, team members are excavating one-person tombs.**



**The opening here leads down to a one-person tomb. The pottery at left was uncovered there, right near the tomb.**

even had vaulted ceilings, and you could walk inside. The single tombs were found in a group of seven. Their arrangement may indicate that they belonged to a family. Each of the seven tombs, however, was about the size of a park bench and completely filled with sand, pottery, and one body. There were no places to cook, no courtyards, and no roofs.

### **A Love of Greece**

The two types of tombs may reflect the fact that, just like today, some families had more money than other families. But determining this is a matter of guesswork, since we must keep in mind that sometimes people buy more than they can afford to give the impression that they are rich. What the excavations have made clear is that the people with the large family tombs wanted to give the impression that they



**Slowly and carefully, each section of this family tomb complex is being excavated. See the worker with the wheelbarrow in the distance? He hauls away the excavation sand and dirt, which will be sifted for small finds and then placed away from the tomb site.**

Regardless of the style, all the tombs were made of mud brick. A closer look at the walls showed that, in the family complexes, they had been plastered and painted with scenes of Egyptian and Greek gods. In addition, they had courtyards for cooking and for storing objects. Some rooms

**Great pots—don't you think? All three were found in one-person tombs.**





**The pointed base on each of these excavated pots (called amphorae) made storage easier, as the pots were stood upright. The base would be anchored in soft ground, making them far less likely to tip and spill their contents.**

were Greek. Many of the objects in their tombs were either imported from beyond Egypt's borders or made in Egypt but fashioned to look as if imported. At the time in Egypt, Greeks were considered the upper class of society.

Figuring out the intentions of the people who built these tombs—or, in fact, any ancient structure—is one of the fun parts of archaeology. And, these tombs of the first settlers at Antinoupolis offer evidence that many types of people made this city their home in its early days.

## What's This?

**T**he terra-cotta figure at right was uncovered during the family-tomb excavations at Antinoupolis. It is about five inches tall and in the shape of a dog. Although its front legs are broken and it is smaller than a real dog, it does have, like all dogs in Egypt today, a curly tail. You might think that it is a toy, but it is a votive figurine. That is to say that it was given as a gift as part of a religious ritual. In this case, it was left in the tomb. Although known as a "Sothic dog," it is still unclear as to what its function really was.



If you look closely at the photo below, you can see that this dog has a human face, with pink paint still on parts of it, and very human-looking eyes. It was buried in the tomb with other votive figurines and is associated with the star Sirius, which even today we call the "dog star." This star (at times known as "Sopdet" or "Sothis") is the brightest star in the night sky. In the ancient Egyptian calendar, it was the most important star, because it disappeared from the sky (and still does) for a period of time during the summer. We call this period the "dog days of summer."

When it reappears in early August, it does so just before dawn.



For the ancient Egyptians, Sirius' reappearance signaled that the waters of the Nile River were about to rise and that the flood season was about to begin. The flood was seen as the renewal of Egypt, because crops were planted in the rich silt left behind as the floodwaters receded. The ancient Egyptians saw Osiris, the god of the afterlife, as the deity responsible for the flooding of the Nile and the return of food and plenty to the land. Why, then, would a dog figurine representing the star Sirius be put

in a tomb? The ancient Egyptians kept dogs as pets and thought of them as faithful companions, just as we do today. Perhaps—and scholars still do not know for sure—the ancients thought that this canine companion would help the new tomb's residents find their way in the underworld.

In archaeology digging, or “excavating,” if you want to use the scientific term—is a long, slow, hot (especially in Egypt), and sometimes boring process! There is almost never a “treasure map.” In addition, by just looking at the surface of the ground, it is very difficult to decide where to dig to recover the most information with the least amount of effort. Sometimes, an archaeologist can dig for many years and find very little. Today, geophysical survey is helping to change this.

### Three Types

Advances in technology have resulted in scientific instruments that can be used to “look” below the surface of the earth without any digging. If these instruments are properly calibrated (adjusted), they can be used to find **archaeological features** as well. The techniques involved are similar to what might happen to you at the doctor’s office, if you have an x-ray, a CT scan, or an

---

**Archaeological features are non-portable artifacts, including soil stains that indicate where storage pits, garbage dumps, structures, or fences once existed.**

# Let's Take a Look

by James B. Heidel



**Making sure that all is positioned just right and that the three “feet” are steady is key to setting up a geophysical survey base station.**

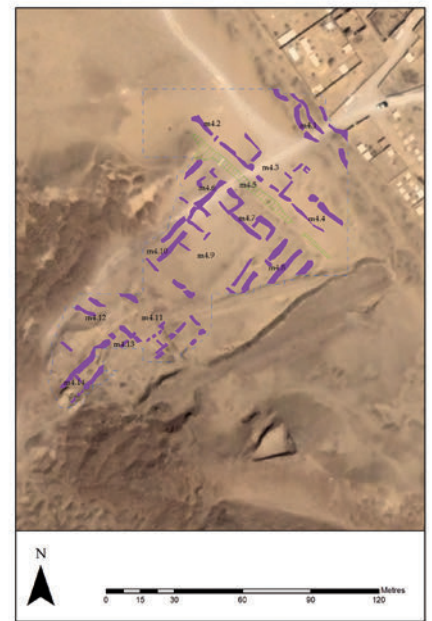


ultrasound. Just as a doctor can look inside you without hurting you, advances in **geophysical** technology enable archaeologists to look inside a site without “hurting” or digging at the site at all.

### The First...

Magnetometry uses magnets held by poles a certain distance apart and moved over the ground at a specific speed (**SEE PHOTO ABOVE AND ON PAGE 56 [TOP]**). The “read” comes through measuring the

change in the magnetic force felt by either of the two poles. As the magnetometer moves along, it can produce a “data set” (a set of computer information) that a skilled geophysical surveyor will then use to form a map of underground features found between the surface and 6.5 feet below the surface of the ground. This technique was used to find the cemetery of Antinoupolis’ first settlers (**SEE PAGES 48–51**). The result was a very useful map that showed where the tombs might be.

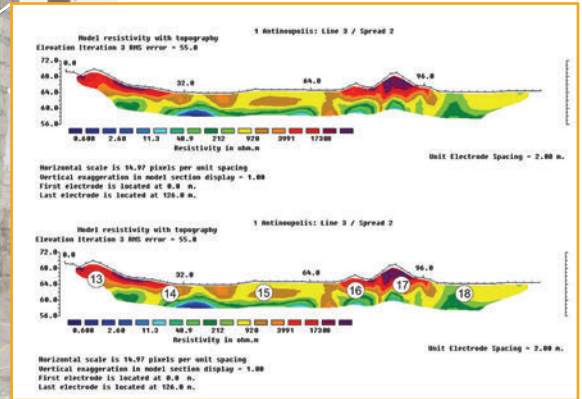


**Here’s magnetometry in progress in the East City Gate test area. The inset shows a geophysical surveyor’s interpretive drawing of East City Gate magnetometry. The purple lines are ancient walls/foundations.**

---

**Geophysical** relates to a field that integrates geology, mathematics, and physics in order to understand Earth processes.

# LET'S GO dig-GING

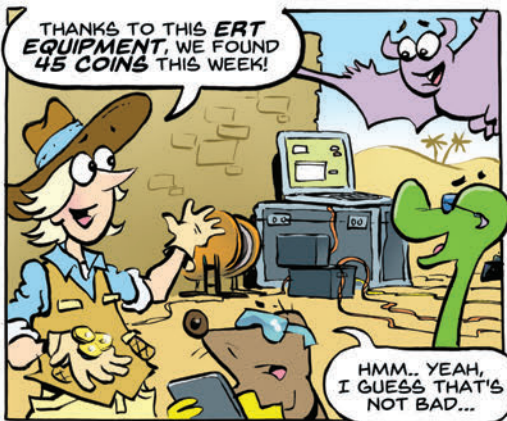


Here's ERT at work: Team members (above) collect ERT results on a laptop. The charts at right above show the results: a section cut through the hippodrome revealing that it has stone structure/foundations.

## The Second...

The second kind of geophysical survey uses electrical pulses from probes driven into the ground. This method (see team at work at left) is called electrical resistivity tomography (ERT). You may

# THE ADVENTURES OF dr. dig BY CHUCK WHELON





already know from school that some materials conduct electricity well and some not so well. With the probes, this difference in conductivity can be measured for all materials up to 26 feet below the ground. The results depend, of course, on how conductive the materials are. This technique was used to find the harbor edge in one location at Antinoupolis. Archaeologists found that the concrete wall of the harbor edge reached at least 20 feet below ground. Unclear still is how deep the edge might be, because archaeologists never found the bottom!

### The Third...

The last kind of geophysical survey used at Antinoupolis has been ground penetrating radar (GPR).

**Here, team members establish a fixed point, using a flying-saucer-looking device atop an ancient in situ column.**



## ‘Seeing’ the Past

**A**rchaeologists have been mapping Angkor, in Cambodia, for nearly 150 years, but the main focus had always been on the religious monuments. At Angkor, houses of stone were reserved for the gods. These houses were surrounded by cities, whose structures were made of wood that rotted away centuries ago. Recently, however, archaeologists realized that if we look from above using aerial photos and tools such as Google Earth, we can still make out the faint traces of those cities—except where trees hide them from planes and satellites, which is the case for much of Angkor. So, in 2012, we carried out an airborne laser scanning (or “lidar”) campaign at Angkor.

Lidar has a unique capability to “see through” even the densest vegetation and map the faint traces of long-forgotten neighborhoods.

The results of the 2012 lidar campaign were spectacular. Entire ancient cities, lying hidden beneath the forest, were revealed to archaeologists for the first time.

In 2015, we launched a second, greatly expanded campaign across Cambodia, once again with a lidar instrument attached to the landing skid of a helicopter (the lidar attachment is the white box in the photo above). We finished flying in April, in what has become the largest-ever lidar campaign for archaeology completed anywhere in the world. We are still processing the data, but the first results look pretty amazing, and we expect the findings to be at least as significant as last time around. Stay tuned for updates!

.....  
**Damian Evans**, an archaeologist with the French School of Far Eastern Studies (EFEO), specializes in using remote sensing technologies to uncover and map ancient landscapes.

**Lidar** is a remote sensing technology that measures distance by illuminating a target with a laser and analyzing the reflected light.

As with regular radar, this technique uses radio waves, but it shoots them under the ground and measures the time it takes for them to bounce back off of underground features, as well as the intensity with which these waves bounce back off of underground features. A skilled geophysical engineer can interpret the results and produce a plan of the area. At Antinoupolis, archaeologists have used this method inside the main part of the city, in locations where they thought there might be large public buildings, such as libraries or shopping malls. This work located several large structures in different parts of the city. How



Precision is key as team members survey grid squares for magnetometry.

each was used is still not known—not yet, anyway!

Geophysical survey is an important tool for archaeologists, but it can only give an indication of where something is, not what it is.

For the “what,” you must dig! The large structures that GPR found at Antinoupolis are the most recent work at the site, and archaeologists will be excavating in these areas in future seasons. Stay tuned!

## The Antinous Obelisk

One of the most important artifacts for understanding Antinoupolis is an obelisk carved during the reign of Hadrian and now standing in a park in Rome (see inset at right). Because the Barbarini family purchased it in the 1630s, it is known not only as the Antinous obelisk but also as the Barbarini obelisk. The Egyptian hieroglyphs carved into the stone tell us about Antinoupolis and about games, similar to the Olympics, that were held there in honor of Antinous. Among the events were rowing and racing competitions, and the winners were given wreaths of flowers for their heads. The text goes on to say that the settlers at Antinoupolis were given land to make their lives good and that a temple of Osir-Antinous was built of good white stone. The photo at far right shows a detail of the pyramidion (pointed top) with the relief showing an offering being made to the god Amun (seated at top).

The basic structure of the temple was surrounded by statues of gods and sphinxes and by numerous columns in both the Greek and Egyptian styles. And—like any good treasure map—hieroglyphs on the obelisk say that it marks the site of Antinous’ tomb! But, there is problem. Scholars cannot agree about the original location of the obelisk. Some say it was at Antinoupolis; others insist on various locations in Italy.



## Coin Purse

**A**t some point near the end of the second century A.D., a man or a woman was visiting his, or her, family tomb in the desert north of Antinoupolis. Inside one of the dark inner chambers, a coin purse—a small linen bag with a drawstring—slipped from the person's belt and fell to the ground. The tomb was dark, and he or she must not have noticed that it fell. There is no way to know if anyone ever came back to look for it. It is, however, very clear that it was never found, because archaeologists found it **(ABOVE)** in the tomb, lying where it had fallen, on top of the earthen floor.

“What a treasure!” you might think, and you would be right. But, it is not one that is worth a lot of money, because the coins are not gold; they are not even silver. Instead they are an alloy called “billon,” which was common in ancient Rome and consisted, in this case, of a much cheaper metal, bronze, with only a tiny bit of silver added. The treasure here—as with almost all archaeological finds—is the information the find provides.

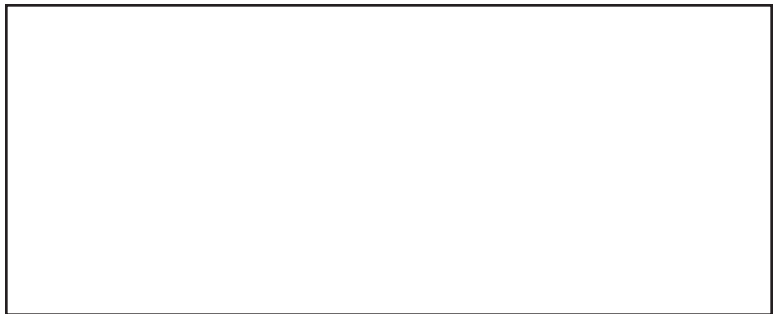
While pottery is the most common means of dating archaeological levels (called “strata”), coins are even better! Often, pottery can give only an



approximate date, within a span of perhaps as much as 200 years or more. Most coins can be dated to a specific year. Further, even though people carry them around for years, the date range of coins is much narrower than the date range of pottery. Of the 45 coins in the linen bag, 42 date to Hadrian's reign (A.D. 117–138), and the other three to the reigns of his successors, Antoninus Pius and Marcus Aurelius. This means that the bag most likely was dropped on the tomb's floor around the time of Marcus Aurelius' death in A.D. 190. What, then, is the “treasure”? This find proves that the tomb belonged to one of the first families to settle in Antinoupolis, since the purse was dropped only 60 to 70 years after the city was founded.

—James B. Heidel

# THEN & NOW



**NOW:** Today's equivalent of a "war elephant" is often said to be a tank. At xxx is a World War II tank in Tunisia (present-day site of Carthage). Tanks, like elephants, can move across all sorts of terrain, with only a driver, gas, and a good mechanic.



Alamy C51DMG

**THEN:** In 218 B.C., during the Second Punic War, Hannibal Barca marched from what is present-day Spain to Italy via the Alps with his troops and some "war elephants." How many elephants were there? How did Hannibal transport them to Spain from Africa? How were they trained? What did they eat? Elephants can eat 400 pounds of food a



www.shutterstock.com · 56710102



Alamy EWTMAE

## WHAT'S CHANGED?

Obviously, technology has changed everything about warfare. There is less hand-to-hand combat and direct confrontation with the enemy.



Alamy DYER9W

## WHAT'S THE SAME?

To have something strong, solid, and able to plow through everything in its way can give a side the edge in battle. Tanks are the modern elephants!