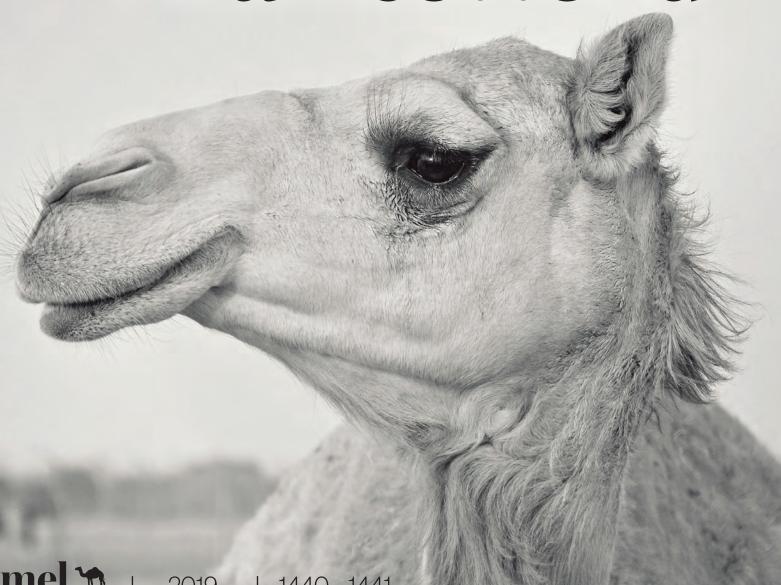
# Aramcoworld.com Aramcoworld.com Orld



Camel YM

2019 GREGORIAN 1440-1441

### Camels and Culture



#### WRITTEN BY PETER HARRIGAN

ver since camels gradually fell into the service of people in the arid lands of Arabia, Africa and Asia about 4,000 years ago, they have evoked wonderment. Their domestication, late compared with other species, had a profound influence on the societies of these vast territories through the exchange of ideas and the interaction of languages as well as culture both intangible and material. They provided, for the first time, an effective means for long-distance overland travel for merchants and the seasonal migrations of tribes. By the coming of Islam in the seventh century CE, a complex network of trade and pilgrimage routes had developed that connected the far reaches of the known world.

The consequences were as significant then as those experienced more recently with the advent of the telegraph, the internal combustion engine and, most recently,

the Internet.

DO THEY NOT LOOK AT THE CAMELS, HOW THEY ARE MADE? AND AT THE SKY, HOW IT IS RAISED?

-QUR'AN 88:17 (ENGLISH BY YUSUF ALI) There are two domesticated camel species, and they can be identified with ease. The one-humped species numbers some 27 million worldwide, making it by far the most populous. It has also the greatest variety of breeds, numbering at least 90. Known as the dromedary (*Camelus dromedarius*), it inhabits the hot desert lands of the Arabian Peninsula, Levant, North Af-

rica and the Horn of Africa. The two-humped species, the Bactrian (*Camelus bactrianus*), numbers around three million. It populates the colder deserts and steppes of Central Asia with 14 recognized breeds.

The wild predecessors of both the dromedary and the Bactrian camels are extinct. Archeologists and geneticists are now using ever-more-sophisticated technologies to unpick often scant and elusive evidence of the story of its evolutionary migration, domestication and ancestral species extinctions. Today the only surviving wild species of camel is the two-humped *Camelus ferus*, whose critically endangered population of about 1,000 lives mainly in the Gobi Desert.

Studies of all three species continue to reveal wonders of adaptation, characteristics and potential. Wild camels, for example, can drink slush with more salt in it than seawater. (They also appear to have been unaffected by decades of nuclear tests conducted in their now-protected habitat.) Milk from camels contains an insulin-like molecule, and it is replete with antibodies and enzymes. It lowers cholesterol in humans, and it can be consumed by people with allergies to cow's milk. Studies are currently examining camel-milk immunoglobulins for cancer-fighting potential.

The camel's environmental adaptations include blood-temperature range not unlike that of reptiles, and this helps camels endure extreme temperatures. In addition, as dehydration thickens a camel's blood, its red cells elongate, which enables them to flow con-

### PATTERNS OF MOON, PATTERNS OF SUN

WRITTEN BY

PAUL LUNDE

#### THE HIJRI CALENDAR

In 638 CE, six years after the death of the Prophet Muhammad, Islam's second caliph, 'Umar, recognized the necessity of a calendar to govern the affairs of Muslims. This was first of all a practical matter. Correspondence with military and civilian officials in the newly conquered lands had to be dated. But Persia used a different calendar from Syria, where the caliphate was based; Egypt used yet another. Each of these calendars had a different starting point, or

epoch. The Sasanids, the ruling dynasty of Persia, used June 16, 632 CE, the date of the accession of the last Sasanid monarch, Yazdagird III. Syria, which until the Muslim conquest was part of the Byzantine Empire, used a form of the Roman "Julian" calendar, with an epoch of October 1, 312 BCE. Egypt used the Coptic calendar, with an epoch of August 29, 284 CE. Although all were solar calendars, and hence geared to the seasons and containing 365 days, each also had a different system for periodically adding days to compensate for the fact that the true length of the solar year is not 365 but 365.2422 days.

In pre-Islamic Arabia, various other systems of measuring time had been used. In South Arabia, some calendars apparently were lunar, while IT IS HE WHO MADE THE SUN TO BE A SHINING GLORY, AND THE MOON TO BE A LIGHT (OF BEAUTY), AND MEASURED OUT STAGES FOR HER, THAT YE MIGHT KNOW THE NUMBER OF YEARS AND THE COUNT (OF TIME).

-QUR'AN 10:5 (ENGLISH BY YUSUF ALI)

others were lunisolar, using months based on the phases of the moon but intercalating days outside the lunar cycle to synchronize the calendar with the seasons. On the eve of Islam, the Himyarites appear to have used a calendar based on the Julian form, but with an epoch of 110 BCE. In central Arabia, the course of the year was charted by the position of the stars relative to the horizon at sunset or sunrise, dividing the ecliptic into 28 equal parts corresponding to the location of the moon on each successive night of the month. The names of the months in that calendar have continued in the Islamic calendar to this day and would seem to indicate that, before Islam, some sort of lunisolar calendar was in use, though it is not known to have had an epoch other than memorable local events.

There were two other reasons 'Umar rejected existing solar calendars. The Qur'an, in Chapter 10, Verse 5, states that time should be reckoned by the moon. Not only that, calendars used by the Persians, Syrians and Egyptians were identified with other religions and cultures. He therefore decided to create a calendar specifically for the Muslim community. It would be lunar, and it would have 12 months, each with 29 or 30 days.

This gives the lunar year 354 days, 11 days fewer than the solar year. 'Umar chose as the epoch for the new Muslim calendar *Hijra*, the emigration of the Prophet Muhammad and 70 Muslims from Makkah to Madinah, where Muslims first attained religious and political autonomy. Hijra thus occurred on 1 Muharram of the year 1 according to the Islamic calendar, which was named *hijri* after its epoch. (This date corresponds to July 16, 622 CE,

tinuously. To help the camel hold water, the cells can expand to more than three times their original volume—far more than those of any other mammal. (This is what allows a camel to drink up to 120 liters in 10 minutes—more capacity than the fuel tank of a large utility vehicle, and not much more time in "refueling.") As for its range capabilities, a watered camel can travel, with time for grazing, up to a week or more without water, and it can cover more than 600 kilometers.

The rider's experience is also unique. Explorer and writer Eldon Rutter traveled on camelback in western and northern Arabia in 1926. During hot months, desert travel was often best during the cooler hours of darkness, and Rutter describes the mesmerizing experience with the patient camels pacing forward until dawn. "It seems to the rider borne at such a height aloft, that he is silently gliding or swimming over a yielding unstable surface," he wrote in his acclaimed book, *The Holy Cities of Arabia*.

In contrast, much other Western literature has stereotyped dromedaries as either whimsical or aggressive and ill-tempered, whereas anyone who has come to know and work with them invariably regards them as intelligent, sociable and gentle.

These characteristics and qualities of the dromedary have been deeply known in Arab lands for thousands of years, where camels have been a major motif in Arabic poetry, stories, vocabulary, metaphors, proverbs and humor. Camels literally enabled the transmission of an oral tradition. Traditional poems often include a description and elaborate panegyric that describes the fine mount that brings the poet or storyteller to audiences far and wide.

Today the dromedary is increasingly celebrated throughout the region for this cultural legacy, and for providing such a rich, productive and symbiotic relationship with its herders, breeders and keepers.

Globally, the camel population today accounts for fewer than one percent of domesticated herbivores. (Cows and cattle number two *billion*.) It is in the arid lands of Africa—and particularly in the Horn of Africa—that camel populations are highest and rising, as they are bred and tended as valuable, sustainable sources of food and materials: Estimates cite as many as 20 million, or roughly 80 percent of the dromedary population worldwide. The Arabian Peninsula has a dromedary population of around 1.5 million, and scientists in Saudi Arabia and the United Arab Emirates are spearheading a growing field of research.

With its adaptability highly suited to face today's emerging challenges of climate change, says Bernard Faye, a camel expert with the Food and Agriculture Organization of the United Nations, camels "represent a fabulous biological model for scientists from different disciplines." He argues that the camel's place in the world deserves to be re-evaluated in light of trends and potential, including the qualities of their milk and meat, as well the promise of new derivative products. Little wonder, Faye contends, that no other domesticated animal has offered humans so much utility, pleasure and value.

**Peter Harrigan** is a contributing editor and senior writer for *AramcoWorld* as well as founder and editorial director of Medina Publishing.



On the cover: "I like how the expression of the camel suggests pride and a hint of a smile," says photographer Marin Tomic, who came eye to eye with this dromedary during a jeep tour in Dubai.

EDITOR: RICHARD DOUGHTY; PHOTO EDITOR: JOHNNY HANSON; DATENOTES: ALVA ROBINSON; DESIGN: GRAPHIC ENGINE DESIGN STUDIO; PRINTING: RR DONNELLEY / WETMORE.

on the Gregorian calendar.) Today in the West, it is customary, when writing hijri dates, to use the abbreviation AH, which stands for the Latin *anno hegirae*, "year of the hijra."

Because the Islamic lunar calendar is 11 days shorter than the solar, it is therefore not synchronized to the seasons. Its festivals, which fall on the same days of the same lunar months each year, make the round of the seasons every 33 solar years. This 11-day difference between the lunar and the solar year accounts for the difficulty of converting dates from one system to the other.

#### THE GREGORIAN CALENDAR

The early calendar of the Roman Empire was lunisolar, containing 355 days divided into 12 months beginning on January 1. To keep it more or less in accord with the actual solar year, a month was added every two years. The system for doing so was complex, and cumulative errors gradually misaligned it with the seasons. By 46 BCE, it was some three months out of alignment, and Julius Caesar oversaw its reform. Consulting Greek astronomers in Alexandria, he created a solar calendar in which one day was added to February every fourth year, effectively compensating for the solar year's length of 365.2422 days. This Julian calendar was used throughout Europe until 1582 CE.

In the Middle Ages, the Christian liturgical calendar was grafted onto the Julian one, and the computation of lunar festivals like Easter, which falls on the first Sunday after the first full moon after the spring equinox, exercised some of the best minds in Christendom. The use of the epoch 1 ce dates from the sixth century, but did not become common until the 10th.

The Julian year was nonetheless 11 minutes and 14 seconds too long. By the early 16th century, due to the accumulated error, the spring equinox was falling on March 11 rather than where it should, on March 21. Copernicus, Christophorus Clavius and the physician Aloysius Lilius provided the calculations, and in 1582 Pope Gregory XIII ordered that Thursday, October 4, 1582, would be followed by Friday, October 15, 1582. Most Catholic countries accepted the new "Gregorian" calendar, but it was not adopted in England and the Americas until the 18th century. Its use is now almost universal worldwide. The Gregorian year is nonetheless 25.96 seconds ahead of the solar year, which by the year 4909 will add up to an extra day.

The late **Paul Lunde** was a senior research associate with the Civilizations in Contact Project at Cambridge University and author of more than 70 articles for *AramcoWorld*.

### CONVERTING YEARS AND DATES

The following equations convert roughly from Gregorian to hijri and vice versa. However, the results can be slightly misleading: They tell you only the year in which the other calendar's year *begins*. For example, 2019 Gregorian begins in Rabi` II, the fourth month of hijri 1440, and ends in Jumada I, the fifth month of hijri 1441.

Gregorian year =

[(32 x Hijri year) ÷ 33] + 622

Hijri year =

[(Gregorian year - 622) x 33] ÷ 32

Online calculators can be found by searching "Gregorian-hijri calendar calculator" or similar terms.



## January RABI' II 1440 - JUMADA I





	S	M	Т				S
			25 <b>1</b>	26 <b>2</b>	27 <b>3</b>	28 <b>4</b>	29 5
				NASA scientist Farouk El-Baz born in Egypt 1938		Carsten Niebuhr and the Danish Expedition to Arabia set sail 1761	
30	6	<b>7</b>	2 8	<b>3 9</b>	4 10	5 <b>11</b>	6 12
			`Abd al-`Aziz Al-Sa'ud declared King of Hijaz 1926				Bikaner Camel Festival opens in Bikaner, Rajasthan, India
7	13	8 14	9 15	10 <b>16</b>	11 <b>17</b>	12 <b>18</b>	13 <b>19</b>
		Russian Turkologist Vasily Radlov born 1837			Egyptian actress Dalida born 1933		
14	20	15 <b>21</b>	16 22	17 <b>23</b>	18 <b>24</b>	19 <b>25</b>	20 <b>26</b>
Camel Wrestlir begins in Selçu				Seattle-Tashkent Sister City Association formed 1973			Austro-Ottoman War ends 1699
21	27	22 <b>28</b>	23 <b>29</b>	24 <b>30</b>	25 <b>31</b>	DEC 2018  2 3 4 5 6 7 8	FEB 2019  1
		C. R. Ali coins "Pakistan" 1933			Freya Stark, British explorer of the Mideast, born 1893	9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28

#### Photo by

FERDINANDO SCIANNA/MAGNUM PHOTOS Desert travelers outside of Douz, Tunisia, 1969. While camels have been in use in the Arabian Peninsula for several thousand years, they did not come into systematic use in North Africa until the early centuries ce. The great network of trans-Saharan camel-caravan routes flourished from the early Islamic era, in the seventh and eighth centuries, through Ottoman times, until the 19th century.

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		-	W	-	_	0
S	M	Т	W	Т	F	S
			JAN 2019  1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	MAR 2019  3 4 5 6 7 8 9  10 11 12 13 14 15 16  17 18 19 20 21 22 23  24 25 26 27 28 29 30  31	India's Gurkani Empire enters classical age under Akbar 1556	27 <b>2</b>
28 <b>3</b>	29 <b>4</b>	30 5	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>
Geographer Ibn Jubayr departs Granada for Makkah 1183		Azeri composer Gara Garayev born 1918		International Zaafrane Festival opens in Tunisia		Chagatai poet Ali-Shir Nava'i born in Herat 1441
5 <b>10</b>	6 11	7 <b>12</b>	8 <b>13</b>	9 14	10 <b>15</b>	11 <b>16</b>
12 <b>17</b>	13 <b>18</b>	14 <b>19</b>	15 <b>20</b>	16 <b>21</b>	17 <b>22</b>	18 <b>23</b>
Jaisalmer Desert Festival opens in India	First air crossing over the Sahara 1920			Indian scholar Shah Waliullah Dehlawi born 1703		
19 <b>24</b>	20 <b>25</b>	21 <b>26</b>	22 <b>27</b>	23 <b>28</b>		
Travel writer Ibn Battuta born 1304			Franciscus Raphelengius, Europe's first printer of Arabic outside of Rome, born 1539	English rock band Camel releases its first album 1973		

#### Photo by

MATTHIEU PALEY

Alongside a Bactrian camel, girls wrap themselves against winter's cold in the Afghan Pamir mountains. Among nomadic and semi-nomadic people in high regions of Central Asia, yaks are often used as well as camels for carrying. These girls are using their camel to carry drinking water for their family. More than one-humped dromedaries, two-humped Bactrian camels can endure extremes of both heat and cold.

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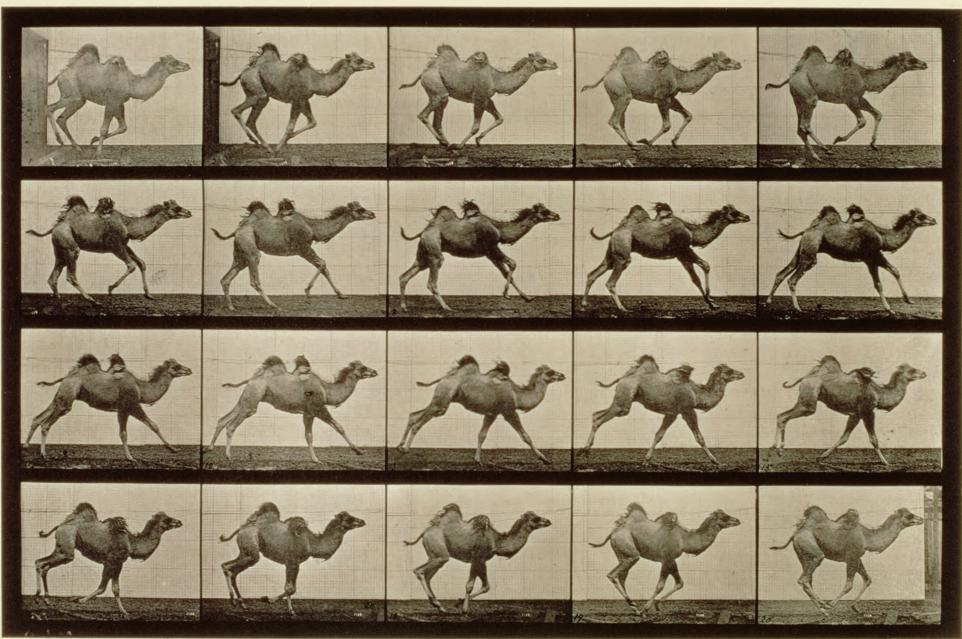
				FEB 2019		APR 2019			
				3 4 5 6 7 8	1 2 8 9 15 16 22 23	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	24	Traveler Georgian 1577	<b>2</b> ge Sandys
27	4	28	5	29	6	30 <b>7</b>	1 8	2	9
4	11	5	12	6	13	7 <b>14</b>	8 <b>15</b>	9	16
	Arabic						uk recognizes Egyptian independence 1922		
11	18	12	19	13	20	14 <b>21</b>	15 <b>22</b>	16	23
		1st King Abdulaziz Car Festival opens 2017	mel			Alykul Osmonov, Kyrgyz poet, born 1915		Saudi cultural	festival,
	25	19	26	20	27	21 <b>28</b>	22 29	23	30
1	Facebook launches version 2009	11	Thousand Camel Fest opens in Dalanzadgad Mongolia  11 5  Facebook launches Arabic version 2009  11 18 12  1st King Abdulaziz Car Festival opens 2017  18 25 19	Thousand Camel Festival opens in Dalanzadgad, Mongolia  4 11 5 12  Facebook launches Arabic version 2009  7 11 18 12 19  1st King Abdulaziz Camel Festival opens 2017  4 18 25 19 26	Thousand Camel Festival opens in Dalanzadgad, Mongolia	3 27 4 28 5 29 6  Thousand Camel Festival opens in Dalanzadgad, Mongolia  D 4 11 5 12 6 13  Facebook launches Arabic version 2009  T 11 18 12 19 13 20  1st King Abdulaziz Camel Festival opens 2017  1 18 25 19 26 20 27	3 27 4 28 5 29 6 30 7  Thousand Camel Festival opens in Dalanzadgad, Mongolia  D 4 11 5 12 6 13 7 14  Facebook launches Arabic version 2009  T 11 18 12 19 13 20 14 21  1st King Abdulaziz Camel Festival opens 2017  Alykul Osmonov, Kyrgyz poet, born 1915  1 18 25 19 26 20 27 21 28	3 27 4 28 5 29 6 30 7 1 8  Thousand Camel Festival opens in Dalanzadgad, Mongolia  1 1 5 12 6 13 7 14 8 15  Facebook launches Arabic version 2009  7 11 18 12 19 13 20 14 21 15 22  Alykul Osmonov, Kyrgyz poet, born 1915  4 18 25 19 26 20 27 21 28 22 29	3 27 4 28 5 29 6 30 7 1 8 2  Thousand Camel Festival opens in Dalanzadgad, Mongolia  D 4 11 5 12 6 13 7 14 8 15 9  Facebook launches Arabic version 2009  T 11 18 12 19 13 20 14 21 15 22 16  Alykul Osmonov, Kyrgyz poet, born 1915  Alykul Osmonov, Kyrgyz poet, born 1915

#### Photo by

LARS BJURSTRÖM

Mamduah Ibrahim al-Rasheedi stands before one of the scores of petroglyph-covered stone faces in the remote desert near Shuwaymas, in the Ha'il region of Saudi Arabia. This wall shows camels large and small, pecked, chiseled and scraped into the rock by Neolithic artisans. Other friezes depict other animals as well as people. Al-Rasheedi, a school superintendent in the region, learned about the friezes from Bedouin in 2001 and helped bring their existence to the attention of antiquities authorities.

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1254-89.







	S		М	Т	V	/	T	F	S
		25	1	26 <b>2</b>	27	3	28 <b>4</b>	29 <b>5</b>	1 6
							Arabian Nights translator Antoine Galland born 1646		Edward E. Salisbury, Yale's first professor of Arabic and Sanskrit, born 1814
2	7	3	8	4 9	5	10	6 11	7 <b>12</b>	8 <b>13</b>
				Heinrich Schliemann begins to dig for ancient Troy 1870					
9	14	10	15	<sup>11</sup> <b>16</b>	12	17	13 <b>18</b>	14 <b>19</b>	15 <b>20</b>
ввс recording of King Tut 19;	of the trumpet 39						First Ouarzazate (Morocco) International Film Festival opens 2016		Historian and scholar Ibn Wasil born in Hamat, Syria 1208
16	21	17	22	18 <b>23</b>	19	24	20 <b>25</b>	21 <b>26</b>	22 <b>27</b>
				Kareem Abdul-Jabbar plays his last La Lakers game 1989				Tatar literary figure Gabdulla Tuqay born 1886	
23	28	24	29	<b>30</b>		3 14 15 16	MAY 2019  1 2 3 4  5 6 7 8 9 10 11  12 13 14 15 16 17 18		
					17 18 19 20 24 25 26 20 31	0 21 22 23 7 28 29 30	19     20     21     22     23     24     25       26     27     28     29     30     31		

#### Photos by

EADWEARD MUYBRIDGE / PRIVATE COLLECTION / STAPLETON COLLECTION / BRIDGEMAN IMAGES For his pioneering photographic study "Animal Locomotion," shot between 1884 and 1887, British photographer, cinematographer and inventor Eadweard Muybridge used tripwires and multiple cameras to capture phases of motion. Camels were among the many animals—and humans—he documented. His work advanced studies of physiology and biomechanics.

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S		M	Т	W	Т	F	S
		APR 2019  1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	JUN 2019  2 3 4 5 6 7 8  9 10 11 12 13 14 15  16 17 18 19 20 21 22  23 24 25 26 27 28 29  30	26 <b>1</b>	27 <b>2</b> International Veterinary Congress on Camel Science opens in London	28 <b>3</b>	29 <b>4</b>
30	5	1 6  Pope John Paul	<b>7</b>	3 8 Egyptian composer and singer Sayyid Mekawy born 1927	<b>9</b>	5 <b>10</b>	6 <b>11</b> Sinai Trail, Egypt's first long-distance hiking trail, opens 2017
7	12	8 <b>13</b>	9 14  34 camels from the Middle East disembark in, Texas 1856	10 <b>15</b>	11 <b>16</b>	12 <b>17</b> West Frontier Days' Texas Camel Corps reenactment opens, Sheffield, Texas	13 <b>18</b>
14  Turkmen poet-hero Magtymguly Pyragy b	<b>19</b>	15 <b>20</b>	16 <b>21</b>	17 <b>22</b>	18 <b>23</b>	lbn Sina claims to see solar transit of Venus 1032	20 <b>25</b>
21	26	22 <b>27</b> Azerbaijan's first legislative body formed 1918	23 <b>28</b>	24 <b>29</b> Sultan Mehmed II takes Constantinople 1453	25 <b>30</b>	26 31	

#### Image courtesy

SUSAN MELLER Reprinted from Silk and Cotton: Textiles from the Central Asia that Was, by Susan Meller (Abrams, 2013) Made by Turkmen seamstresses to caparison the lead camel in a bridal procession, this *düye başlyk* uses bright patchwork sewn in patterns and ribbons that, according to folk beliefs, help bring good luck and ward off the evil eye.

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S		М	Т	W	Т	F	S
					MAY 2019    1   2   3   4     5   6   7   8   9   10   11     12   13   14   15   16   17   18     19   20   21   22   23   24   25     26   27   28   29   30   31	JUL 2019       1     2     3     4     5     6       7     8     9     10     11     12     13       14     15     16     17     18     19     20       21     22     23     24     25     26     27       28     29     30     31	27 <b>1</b> Indian actress Nargiz born 1929
28	2	29 <b>3</b>	1 4	<b>5</b>	<b>6</b>	<b>7</b>	5 <b>8</b>
Mamluk Sultanate in Egypt 1250	e founded					Turkish novelist Orhan Pamuk born 1952	
6	9	7 10	8 11	9 12	10 13	11 14	12 15
First Muslim Came arrive in Port Melb Australia 1860			Turkish American surgeon and Tv host Mehmet Oz born 1960				
13	16	14 <b>17</b>	15 <b>18</b>	16 <b>19</b>	17 <b>20</b>	18 <b>21</b>	19 22
					Gardoum and Berrada become Morocco's first female surfers to compete abroad 2017		World Camel Day
20	23	21 <b>24</b>	22 <b>25</b>	23 <b>26</b>	24 <b>27</b>	25 <b>28</b>	26 <b>29</b>
27	30	Al-Azhar University building completed in Cairo 972	Khalil Gibran immigrates to America 1895				Bengali mathemathician Sir Ashutosh Mukherjee born 1864

#### Photo by GENE TAN/

EUGENE TAN/ AQUABUMPS A camel ride along the beach at sunset is a daily tourism event in Broome, Australia. Camels were first brought to Australia in the 19th century to support construction in the central and western part of the country. Replaced by motor vehicles in the early 20th century, the camels were set loose in the Outback, where they proliferated. Now they number about 300,000.

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S	M	T	W	Т	F	S
	28 1	29 <b>2</b>	<b>3</b> 0 <b>3</b>	1 4	<b>5</b>	<b>6</b>
	Optics pioneer Ibn al-Haytham born 965				Algerian independence 1962	
4 7	5 8	6 9	7 <b>10</b>	8 11	9 12	10 <b>13</b>
			Erden Eruç begins human-powered global circumnavigation 2007			Camel Cup opens in Alice Springs, Australia
11 14	12 15	13 <b>16</b>	14 <b>17</b>	15 <b>18</b>	16 <b>19</b>	17 <b>20</b>
Abbas II, last khedive of Egypt and Sudan, born 1874					al-Andalus established by Arab Berbers 711	
18 21	19 22	20 <b>23</b>	21 24	22 <b>25</b>	23 <b>26</b>	24 <b>27</b>
			Investor and philantropist Azim Premji born in Bombay 1945			Denis Davydov, inventor of hussar poetry, born 1784
25 <b>28</b>	26 <b>29</b>	27 30	28 <b>31</b>	JUN 2019  2 3 4 5 6 7 8 9 10 11 12 13 14 15	AUG 2019	
		Amir Timur writes French King Charles vi seeking trade 1402		16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	18 19 20 21 22 23 24 25 26 27 28 29 30 31	

Photo by LORRAINE CHITTOCK Ten days into their 30-day, 1,250-kilometer journey from Daraw, in northwest Sudan, to Dongola, Egypt, herders move their stock along the 600-year-old *darb al-arba'in*, or Forty Days' Road, one of the most historic trade routes in Africa. Today the herds are smaller, the route is shorter and, rather than bearing the commodities of trade on their backs, the camels themselves are the commodity. But the herder's lot has not much changed: hot days, cold nights and an unforgiving desert.

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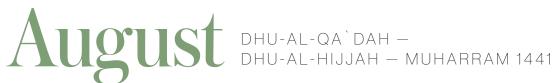
















	5	M	Т	W	Т	F	S
			JUL 2019    1   2   3   4   5   6     7   8   9   10   11   12   13     14   15   16   17   18   19   20     21   22   23   24   25   26   27     28   29   30   31	SEP 2019  1 2 3 4 5 6 7  8 9 10 11 12 13 14  15 16 17 18 19 20 21  22 23 24 25 26 27 28  29 30	29 <b>1</b>	1 <b>2</b>	2 <b>3</b>
3	4	<b>5</b>	<b>6</b>	6 <b>7</b>	7 <b>8</b>	8 9	9 10
Republic of Upprenamed Burkin			Druze Prince Fakhr al-Din Ma'n born on Mount Lebanon 1572			Egyptian poet and lyricist Ahmad Rami born 1892	
10	11	<sup>11</sup> <b>12</b>	12 <b>13</b>	13 <b>14</b>	14 <b>15</b>	15 <b>16</b>	16 <b>17</b>
					`Abd al-Rahman ı lands in Iberia 755		Indonesia proclaims independence 1945
17	18	<sup>18</sup> <b>19</b>	19 20	20 <b>21</b>	21 <b>22</b>	22 <b>23</b>	23 <b>24</b>
			Senegal declares independence 1960			Caliph Omar begins reign 634	
24	25	25 <b>26</b>	26 <b>27</b>	27 <b>28</b>	28 <b>29</b>	29 <b>30</b>	<sup>1</sup> 31
		Michael Eidson invents CamelBak hydration 1989		Sitar virtuoso Vilayet Khan born 1928			Premiere of <i>Wadjda</i> , first commercial feature film by a Saudi woman, 2012

**Images courtesy** UNIVERSAL POSTAL UNION AND ALAMY

Around the world, countries have used postage-stamp designs to highlight history and culture. The stamps here represent a sample of all those that have—in as many different ways as there are countries to produce them depicted camels.

NOTES:			



## September Muharram - Safar





<b>3</b>	5 <b>4</b>	<b>5</b>	<b>6</b>	8 <b>7</b>
n				
			Algerian Amir Abd el-Kader born 1808	
10	12 11	13 <b>12</b>	14 <b>13</b>	15 <b>14</b>
		Ibn Battuta reaches the Indus River 1333		
17	19 <b>18</b>	20 19	21 <b>20</b>	22 <b>21</b>
	Algerian rock-Rai star Rachid Taha born 1958 (d. 2018)			Syrian American radio talk host Diane Rehm born 1936
24	26 <b>25</b>	27 <b>26</b>	28 <b>27</b>	29 <b>28</b>
			Abbasid Caliph al-Ma'mun begins reign 813	Marrakech International Film Festival opens 2001
2 3 0 10 6 17 3 24 0 31	OCT 2019    1   2   3   4   5   6   7   8   9   10   11   12     13   14   15   16   17   18   19     20   21   22   23   24   25   26     27   28   29   30   31			
2	17 24	17 19 18  Algerian rock-Rai star Rachid Taha born 1958 (d. 2018)  24 26 25  OCT 2019    1   2   3   4   5     6   7   8   9   10   11   12     17   18   19     24   20   21   22   23   24   25   26	Ibn Battuta reaches the Indus River 1333	Ibn Battuta reaches the Indus River 1333   20   19   21   20     Algerian rock-Rai star Rachid Taha born 1958 (d. 2018)   24   26   25   27   26   28   27      Abbasid Caliph al-Ma'mun begins reign 813

#### Photo courtesy

LOOK DIE BILDAGENTUR DER FOTOGRAFEN GMBH / ALAMY Bedouin men walk camels in Marsa Alam, Egypt, on the coast of the Red Sea, where camels today mainly service tourism, from short rides to desert safaris.

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S		ı	M	Т		1	W	Т	F	S
				2	1	3	2	<b>3</b>	5 <b>4</b>	<b>5</b>
								World's largest falcon hospital opens in Abu Dhabi 1999		Syrian scholar and historian al-Dhahabi born 1348
7	6	8	7	9	8	10	9	11 10	12 <b>11</b>	13 <b>12</b>
Al-Mahdi, third A begins reign 775				Jordanian archite Khammash born						Harry, Australia's first camel, arrives in Port Adelaide 1840
14	13	15	14	16	15	17	16	18 <b>17</b>	19 18	20 19
						Partition of Be	ngal 1905			
21	20	22	21	23	22	24	23	25 <b>24</b>	26 <b>25</b>	27 <b>26</b>
				First Int'l Forum Leopard Conserv in Kyrgyzstan 20'	ation held			Talal Abu-Ghazaleh inducted into Intellectual Property Hall of Fame 2007	Pirimqul Qodirov, Uzbek writer and historan, born 1928	
28	27	29	28	1	29	2	30	<b>3 31</b>	SEP 2019  1 2 3 4 5 6 7  8 9 10 11 12 13 14	NOV 2019
Sultana Malak o second wife of S Hussein Kamel,	Sultan								15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

#### Photograph

SHARMA / ALAMY

Shaved, cut and dyed in designs that can take as long as three years to produce, camels show what some of the world's top camel-fur-cutting artisans can offer at the annual Bikaner Camel Festival in Rajasthan, India, where they are joined by thousands of spectators. Other events of the two-day fair include camel dancing, camel decorating and cultural performances.

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S		M	Т	W	Т	F	S
				OCT 2019    1   2   3   4   5   6   7   8   9   10   11   12   13   14   15   16   17   18   19   20   21   22   23   24   25   26   27   28   29   30   31	DEC 2019  1 2 3 4 5 6 7  8 9 10 11 12 13 14  15 16 17 18 19 20 21  22 23 24 25 26 27 28  29 30 31	4 <b>1</b>	5 <b>2</b> Ruler Mahmud of Ghazni born 971
6	3	7 <b>4</b>	8 5	9 6	10 7	11 8	12 9
		Pushkar Camel Fair opens in Rajasthan, India		Sultan Suleiman "The Magnificent" born 1494			
13	10	14 11	15 <b>12</b>	16 <b>13</b>	17 <b>14</b>	18 <b>15</b>	19 16
Lebanese singer Sa born 1927	bah	Louvre Abu Dhabi opens 2017	Morocco, Sudan and Tunisia join the United Nations 1956		Poet Rumi meets mentor Shams-e Tabrizi 1244		
20	17	21 18	22 19	23 <b>20</b>	24 <b>21</b>	25 <b>22</b>	26 <b>23</b>
		Omani Sultan Qabooz bin Said born 1940				Lebanon declares independence 1943	
27	24	28 <b>25</b>	29 <b>26</b>	30 <b>27</b>	1 28	2 <b>29</b>	<b>3 30</b>
Writer Ameen Rihar Mount Lebanon 187			Carter and Carnarvon open King Tut's tomb 1922		Oldest Philippine mosque, c. 1380, declared national shrine 2006		Abdulbasit Abdussamed, Egyptian <i>qari</i> , passes away 1988

#### Image courtesy of

"PEACOCK IN THE DESERT: THE ROYAL ARTS OF JODHPUR." This detail of a large painting produced around 1853 by Ali, an artist in the royal court of Maharaja Takhat Singh of Jodhpur, India, shows the women of the court riding camels for a hunt in the desert countryside.

NOTES:			



### December RABI`II - JUMADA I





s	М	Т	W	Т	F	S
4 <b>1</b>	5 <b>2</b>	6 <b>3</b>	<b>4</b>	<b>5</b>	9 6	10 <b>7</b>
King Abdulaziz Center for World Culture opens in Dhahran, Saudi Arabia 2017					Turkish historian Fuat Köprülü born 1890	
11 8	12 9	13 <b>10</b>	14 11	15 <b>12</b>	16 <b>13</b>	17 <b>14</b>
Pakistani poet Nasir Kazmi born 1925				Kyrgyz author Chingiz Aitmatov born 1928		
18 <b>15</b>	19 16	20 17	21 18	22 19	23 20	24 <b>21</b>
Khedive of Egypt Tewfik Pasha born 1852		Amir Timur takes Delhi using camel cavalry 1398		Imperial Camel Brigade formed 1916		
25 <b>22</b>	26 <b>23</b>	27 <b>24</b>	28 <b>25</b>	29 <b>26</b>	1 27	2 <b>28</b>
First flight of the Sopwith Camel fighter biplane 1916	Zaynab (Zenobia), queen of Palmyra, born 245					Uzbek National poet and playwright Erkin Vohidov born 1936
3 <b>29</b>	4 30	5 <b>31</b>	NOV 2019  1 2 3 4 5 6 7 8 9	JAN 2020  1 2 3 4 5 6 7 8 9 10 11		
Bangladeshi artist Zainul Abedin born 1914			10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31		

#### Photo by

AJANSEN / ISTOCK

Not far from where the dromedary was first domesticated 3,000 to 4,000 years ago in the southern Arabian Peninsula, a newborn calf and mother bond in a sandy expanse in Oman. The calf will nurse for 12 to 18 months, and around age seven it will be full grown.

NOTES:			



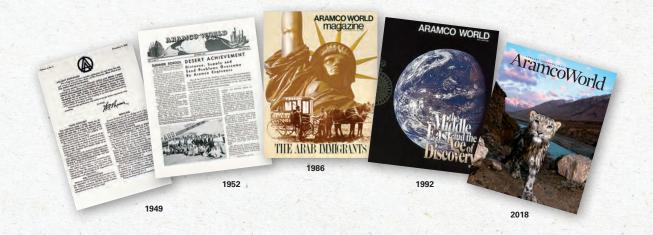
n November 1949 the Arabian
American Oil Company (Aramco)
published the first issue of an
interoffice newsletter named
Aramco World. Over the decades
that followed, as the number
of Americans working with Saudi
colleagues in Dhahran grew into the
tens of thousands, Aramco World
grew into a bimonthly educational
magazine whose historical, geographical and cultural articles helped those
employees and their families appreciate an unfamiliar land.

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