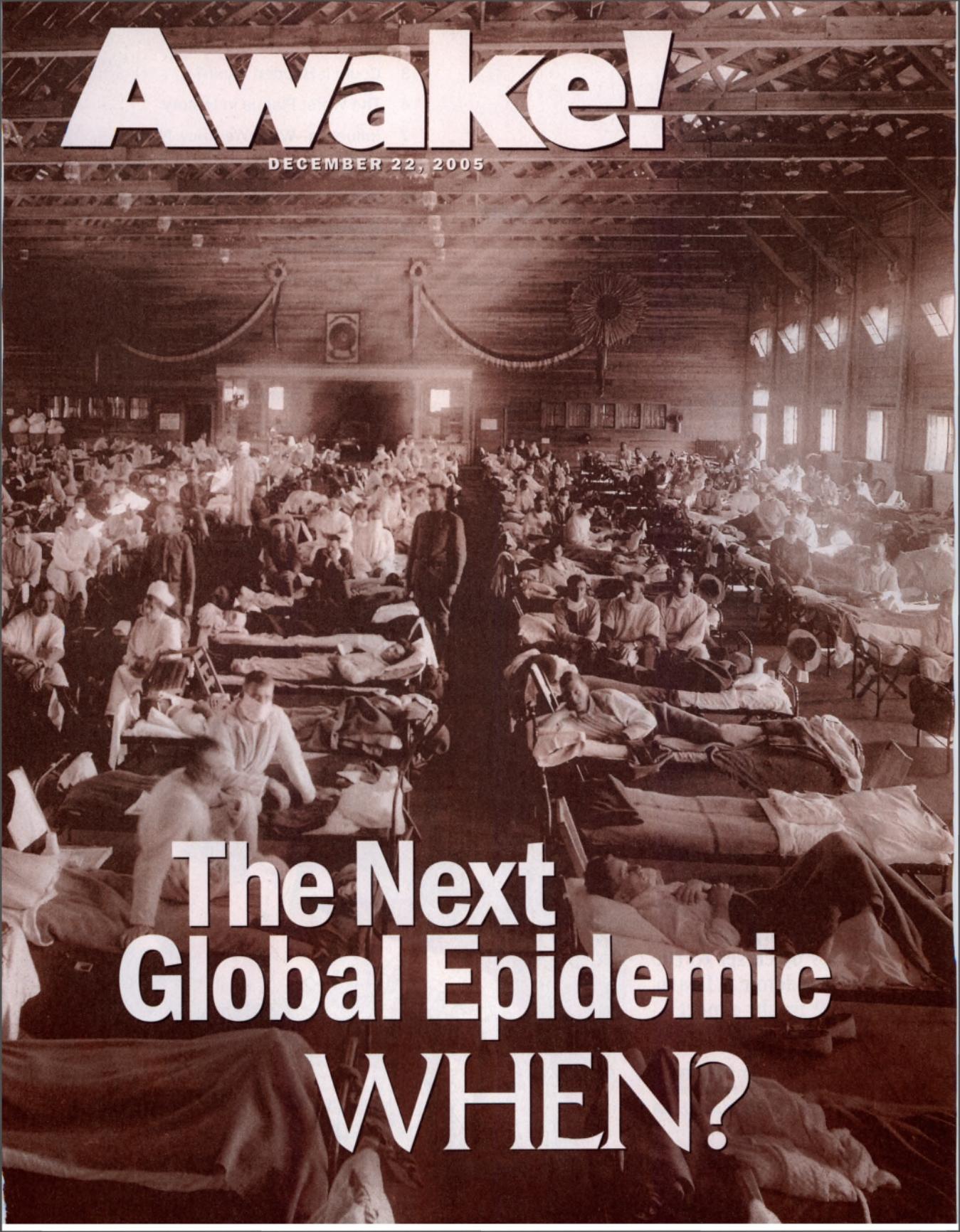


Awake!

DECEMBER 22, 2005



**The Next
Global Epidemic
WHEN?**

Awake!

AVERAGE PRINTING 22,842,000
PUBLISHED IN 82 LANGUAGES



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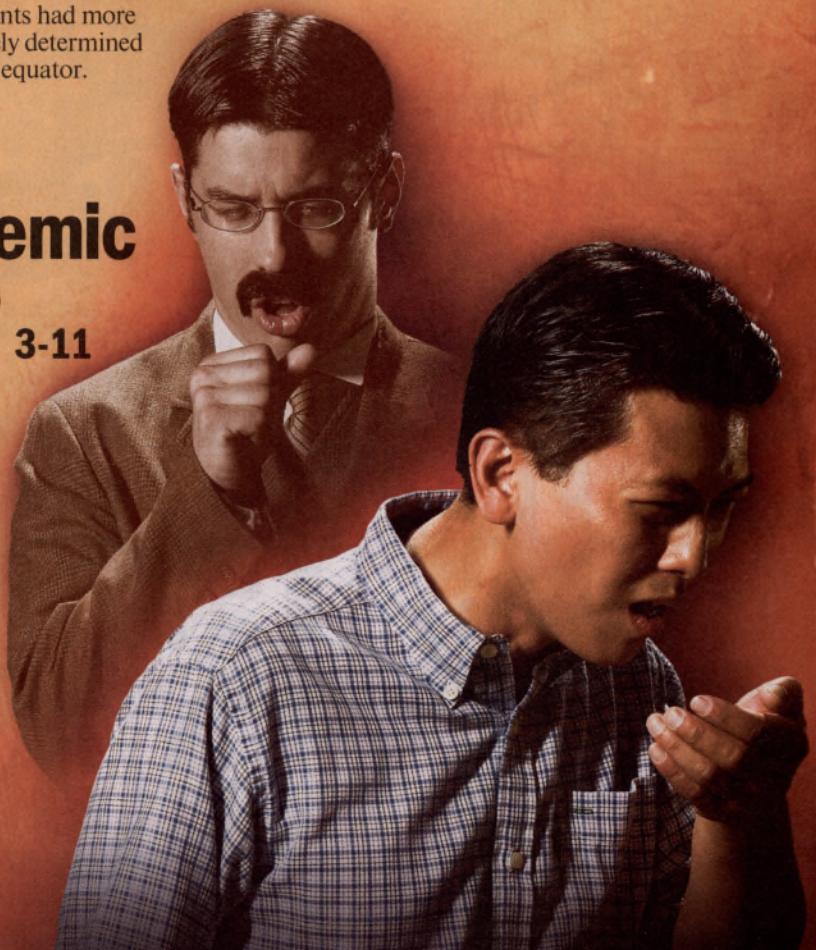
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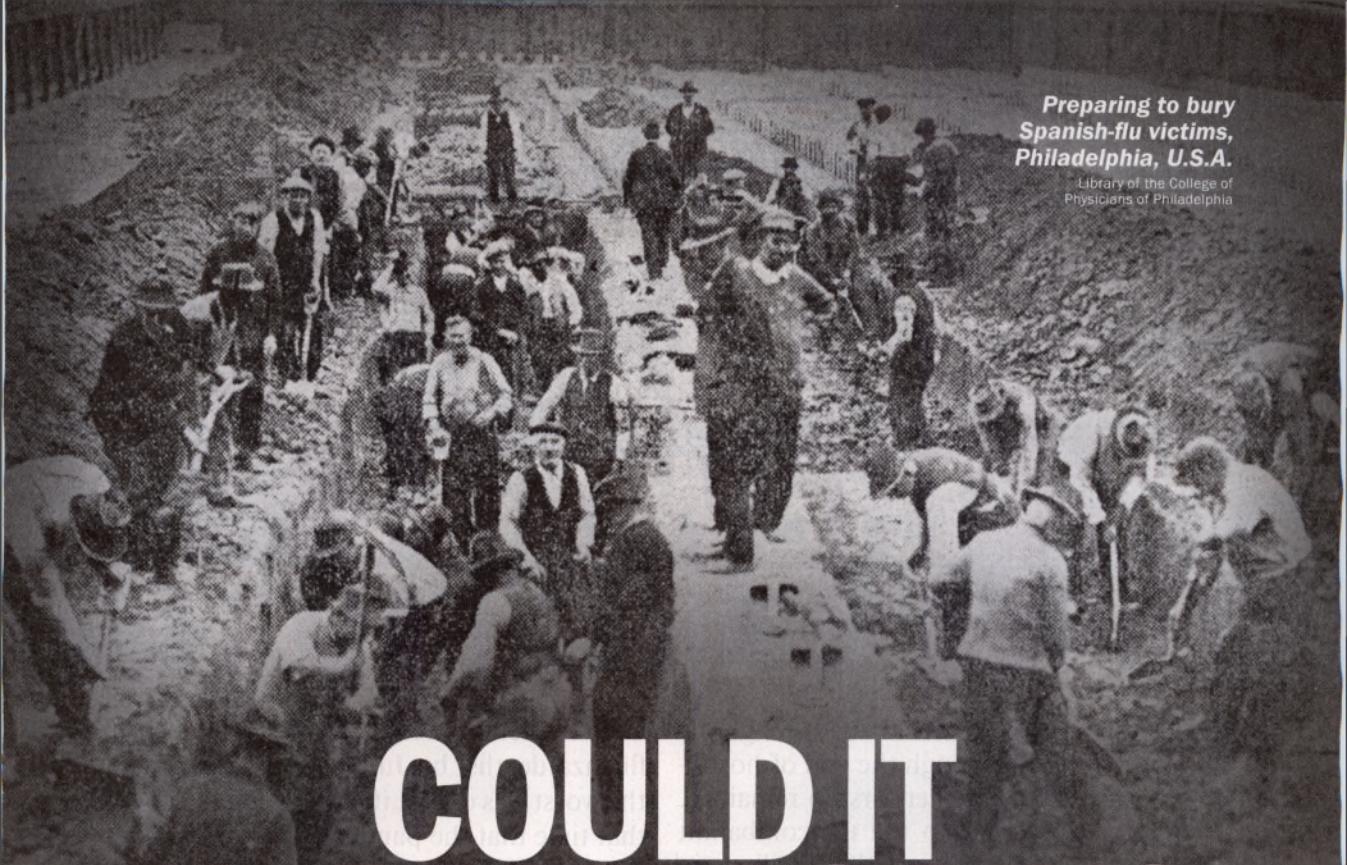
The Next Global Epidemic WHEN? 3-11

The Spanish flu killed more people than any other infectious disease in history. "Each year," one authority says, "brings us closer to the next pandemic." Learn why we might expect such a global epidemic.

Cover: Emergency hospital during Spanish-flu epidemic, Camp Funston, Kansas, U.S.A.

Cover: National Museum of Health & Medicine, Armed Forces Institute of Pathology, NCP 1603





*Preparing to bury
Spanish-flu victims,
Philadelphia, U.S.A.*

Library of the College of
Physicians of Philadelphia

COULD IT HAPPEN AGAIN?

AS WE look back, the era may strike us as quaint, even appealing. In the Western world, for example, it was a time of horse-drawn carriages, top hats, and long, trailing skirts. But it was also a terrifying time when death was on the march worldwide. The cause?

It was not war, although war was then raging. No, we are speaking of another scourge, one that has been called the most destructive in all recorded human history—the Spanish flu, or influenza, of 1918-19.

Victims died en masse, for there was no effective treatment or cure. Millions of healthy young people were suddenly cut down during their most productive

time of life. Corpses piled up faster than they could be buried. In some places entire towns and villages were wiped out.

All this took place some 85 years ago. Do we know what caused that disease? Could a calamity like that occur again? If it did, could we protect ourselves?

There is another fascinating aspect of this subject. Did you know that the Bible long ago had something to say about the pestilences we have seen in our own era? (Luke 21:11; Revelation 6:8) Was the Spanish flu part of a fulfillment of Bible prophecy? The answers to this and other questions will be discussed in the following articles.

A school class of
1919, Canon City,
Colorado, U.S.A.

Courtesy, Colorado Historical
Society, 10026787



THE WORST PLAQUE IN HISTORY

In October 1918, the world was still fighting World War I. Although the end of hostilities was near, news censorship remained. Therefore, it was left to the noncombatant country of Spain to report that civilians in many places were becoming ill and dying at an alarming rate. These circumstances gave rise to the name by which the disease would forever be known—the Spanish flu.

The pandemic began in March 1918.* Many investigators trace its origin to the state of Kansas, U.S.A. From there it was apparently spread to France by newly arrived

* An epidemic is an outbreak of a disease in a certain location—a community, a city, or an entire country. A pandemic is a global epidemic.

U.S. soldiers. After a sharp increase in influenza deaths, by July 1918 it seemed that the worst was over. Little did doctors know at that time that the pandemic was only gathering strength to become a more efficient killer.

When World War I ended on November 11, 1918, the world rejoiced. Ironically, at almost that same time, the pestilence broke out earth wide. It was a monster that now claimed international headlines. Few who lived through that time were untouched, and all were frightened. A respected authority on influenza noted: "Life expectancy in the United States dropped by over 10 years in 1918." How did this pestilence differ from others?

Awake![®]

THIS JOURNAL IS PUBLISHED for the enlightenment of the entire family. It shows how to cope with today's problems. It reports the news, tells about people in many lands, examines religion and science. But it does more. It probes beneath the surface and points to the real meaning behind current events, yet it always stays politically neutral and does not exalt one race above another. Most important, this magazine builds confidence in the Creator's promise of a peaceful and secure new world that is about to replace the present wicked, lawless system of things.

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A police officer

Photo by Topical Press Agency/Getty Images



Baseball players wearing protective masks*

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A Unique Pestilence

A most alarming difference was the suddenness with which this flu struck. How sudden? In the recent book *The Great Influenza*, author John M. Barry quotes a written record of this experience: "In Rio de Janeiro, a man asked medical student Ciro Viera Da Cunha, who was waiting for a streetcar, for information in a perfectly normal voice, then fell down, dead; in Cape Town, South Africa, Charles Lewis boarded a streetcar for a three-mile trip home when the conductor collapsed, dead. In the next three miles six people aboard the streetcar died, including the driver." All died of the flu.

Then, there was the fear—fear of the un-

known. Science had no answer as to the cause of the disease or exactly how it spread. Public health measures were imposed: ports were quarantined; movie theaters, churches, and other public meeting places were closed. In San Francisco, California, U.S.A., for example, officials ordered the whole population to wear gauze masks. Anyone caught in public without a mask faced a fine or jail. But nothing seemed to work. Such measures were simply a case of too little, too late.

There was also fear because the flu struck indiscriminately. For reasons still not clear, the 1919 pandemic did not primarily afflict the elderly; it struck healthy young people and killed them. The majority of those who

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* Audiocassettes also available.

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Would you welcome more information? Write Jehovah's Witnesses at the appropriate address: **America, United States of:** Wallkill, NY 12589. **Australia:** Box 280, Ingleburn, NSW 1890. **Britain:** The Ridgeway, London NW7 1RN. **Canada:** Box 4100, Halton Hills (Georgetown), Ontario L7G 4Y4. **Ghana:** P. O. Box GP 760, Accra. **Jamaica:** P. O. Box 103, Old Harbour, St. Catherine. **New Zealand:** P. O. Box 75-142, Manurewa. **Nigeria:** P.M.B. 1090, Benin City 300001, Edo State. **South Africa:** Private Bag X2067, Krugersdorp, 1740. **Zambia:** Box 33459, Lusaka 10101. **Zimbabwe:** Private Bag WG-5001, Westgate.

died of the Spanish flu were between 20 and 40 years of age.

Moreover, it was truly a *worldwide* epidemic. It even reached tropical islands. Influenza was introduced into Western Samoa (now known as Samoa) by ship on November 7, 1918, and within two months about 20 percent of the population of 38,302 died. Every major country of the world was dramatically affected!

Also, there was the *enormity* of this scourge. For example, the disease hit early and especially hard in Philadelphia, Pennsylvania, U.S.A. By mid-October 1918, there was a serious shortage of coffins. "One manufacturer said he could dispose of 5,000 caskets in

The majority of those who died of the Spanish flu were between 20 and 40 years of age

two hours, if he had them. At times the city morgue had as many as ten times as many bodies as coffins," says historian Alfred W. Crosby.

In a relatively short time, the flu had killed more people than any other pandemic of its kind in human history. A common estimate of worldwide deaths was 21 million, but some experts now judge that figure to be low. Some epidemiologists today suggest that a more likely toll is 50 million deaths or perhaps as many as 100 million! Notes Barry, mentioned earlier: "Influenza killed more people in a year than the Black Death of the Middle Ages killed in a century; it killed more people in twenty-four weeks than AIDS has killed in twenty-four years."

Incredibly, the Spanish flu killed more Americans in about a year than died in battle in both world wars combined. Author Gina Kolata explains: "If such a plague came today, killing a similar fraction of the U.S. population, 1.5 million Americans would die, which is more than the number felled in a single year by heart disease, cancers, strokes, chronic pulmonary disease, AIDS, and Alzheimer's disease combined."

To put matters succinctly, the Spanish flu was the most devastating pandemic in the history of mankind. What help came from science?

When Science Proved Helpless

By the beginning of World War I, medical science had seemingly made great strides in conquering disease. Even during the war, doctors took great pride in their success at reducing the effects of infectious diseases. At the time, *The Ladies Home Journal* declared that American homes no longer needed a room for laying out the dead for viewing. It suggested that such parlors henceforth be called living rooms. But then came the Spanish flu, and medical science proved almost totally helpless.

Crosby writes: "All the physicians of 1918 were participants in the greatest failure of medical science in the twentieth century or, if absolute numbers of dead are the measure, of all time." Lest the blame be placed entirely on the medical profession, Barry makes this point: "Back then scientists fully comprehended the threat's magnitude, knew how to cure many secondary bacterial pneumonias, and gave public-health advice that would have saved tens of thousands of American lives. Politicians ignored that advice."

So now, about 85 years later, what has been learned about this terrible pandemic? What caused it? Could it come back? Could it be fought successfully if it did? Some of the answers may surprise you.



INFLUENZA WHAT WE KNOW NOW

IT IS 1997. A scientist sits in the small Eskimo village of Brevig on the frozen tundra of the Seward Peninsula of Alaska. In front of him is the exhumed body of a young woman that he and four Eskimo helpers have dug out of the permafrost. She fell victim to the flu back in 1918 and has lain there, frozen, ever since.

What good can come from examining her now? The scientist hopes that the flu-causing agent is still in her lungs and that through the use of advanced genetic techniques, it can be isolated and identified. Why might that knowledge prove helpful? To answer, we need to understand a little more about how viruses work and what makes them so dangerous.

A Virus That Can Be Deadly

Today we know that influenza is caused by a virus and that it can be spread from person to person in respiratory secretions expelled by coughing, sneezing, and talking.* It is present worldwide even in the Tropics, where it can strike year-round. In the North-

ern Hemisphere, flu season runs from November to March; and in the Southern Hemisphere, from April to September.

Influenza type A, the most dangerous type of flu virus, is small in size compared with many viruses. It is usually spherical, with projections from its surface. When this virus infects a human cell, it reproduces so rapidly that often within about ten hours, a swarm of between 100,000 and a million new influenza virus "copies" explode from the cell.

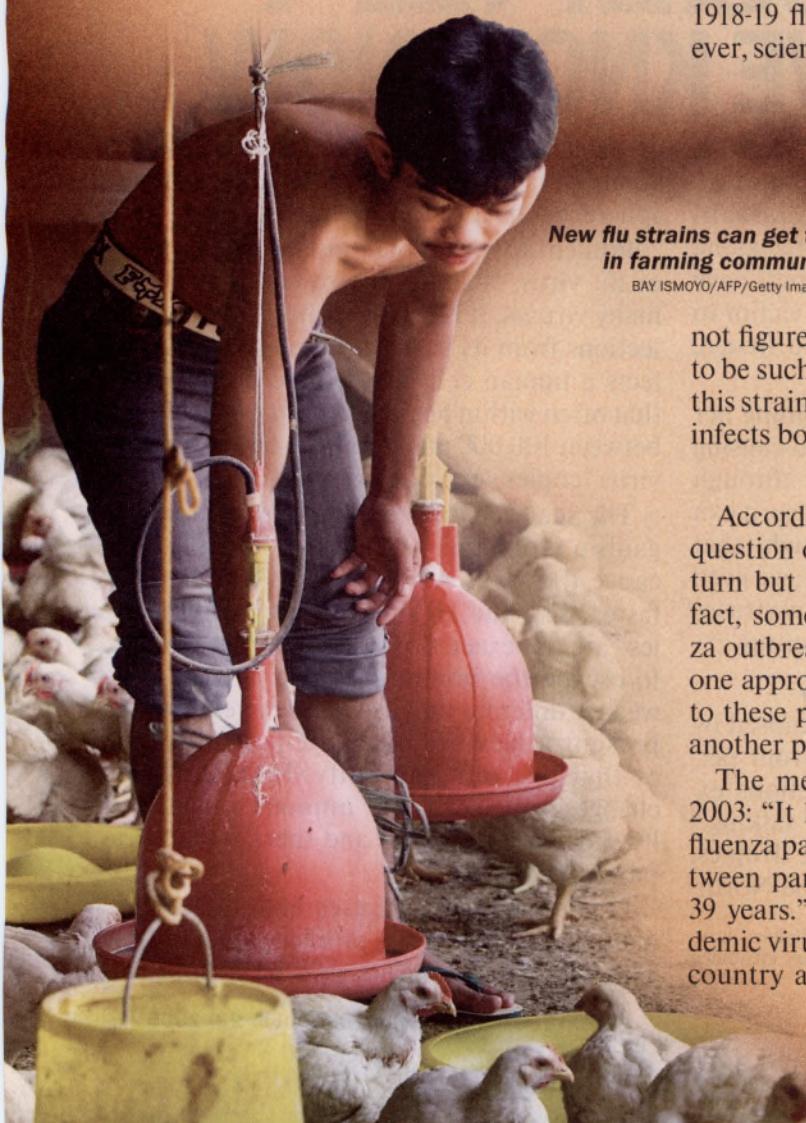
The scary characteristic of this simple organism is its ability to change quickly. Because the virus reproduces so rapidly (far faster than the HIV virus), its many "copies" are not exact. Some are different enough to escape the immune system. That is why we face different flu viruses every year, which present a new set of antigens—substances that test our immunity. If the antigen changes sufficiently, our immune system has little defense against it and there is risk of a pandemic.

Furthermore, flu viruses also infect animals, and therein lies a problem for humans. The pig, it is believed, can be a host for

* The book *Viruses, Plagues, and History* notes: "Italians introduced the term *influenza* in about 1500 for diseases attributed to the 'influence' of the stars."

viruses that infect such birds as chickens and ducks. But it can also be the host for other viruses that infect humans.

Therefore, if a pig becomes infected by both types of viruses—one sort that infects animals and another sort common to humans—the genes of the two strains can get mixed together. The result can be a totally new strain of influenza, one to which humans have no immunity. Some feel that farming communities where poultry, swine, and people live in close proximity—as is often the case in Asia, for example—are likely sources of new flu strains.



New flu strains can get their start
in farming communities

BAY ISMOYO/AFP/Getty Images

Why Did It Become So Virulent?

The question is, What could have caused the flu virus of 1918-19 to turn into a pneumonia-causing killer of young people? Though none of the live virus is left from that time, scientists have long felt that if they could find a *frozen specimen of it*, they might be able to isolate intact RNA and discover what made this strain so lethal. Actually, to some extent they have succeeded.

Thanks to the frozen Alaskan specimen described at the outset of this article, a team of scientists has been able to identify and sequence most of the genes of the 1918-19 flu virus. However, scientists have still

Influenza type A virus

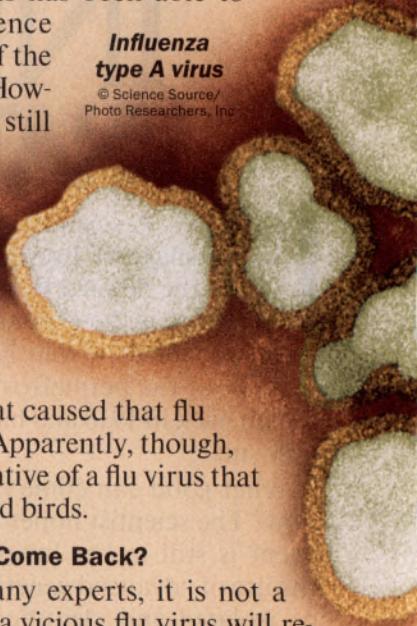
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not figured out what caused that flu to be such a killer. Apparently, though, this strain was a relative of a flu virus that infects both pigs and birds.

Could It Come Back?

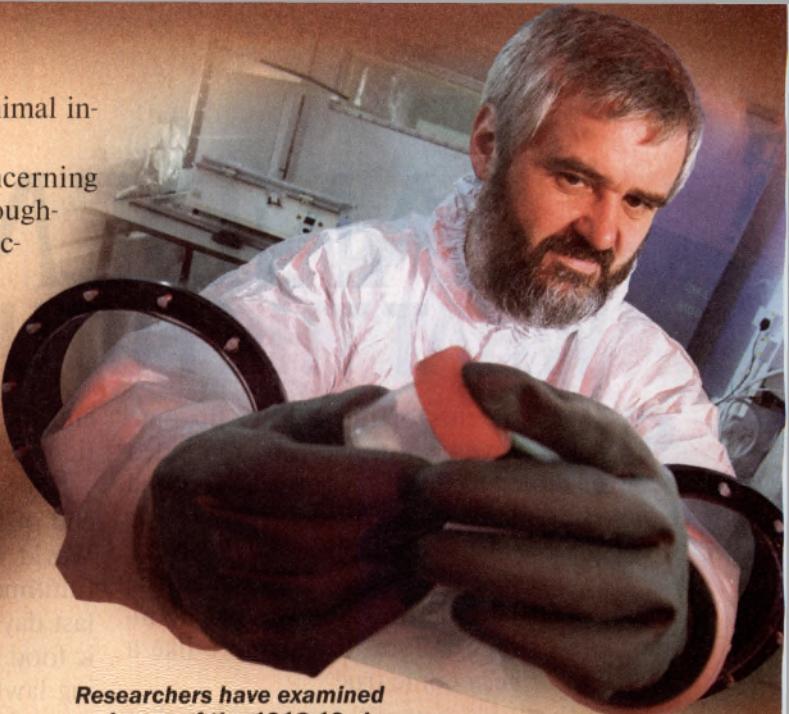
According to many experts, it is not a question of *if* such a vicious flu virus will return but of *when* and *how* it will return. In fact, some expect a significant new influenza outbreak every 11 years or so and a severe one approximately every 30 years. According to these predictions, mankind is overdue for another pandemic.

The medical journal *Vaccine* reported in 2003: "It has been 35 years since the last influenza pandemic, and the longest interval between pandemics recorded with certainty is 39 years." The article continued: "The pandemic virus may emerge in China or a nearby country and could include surface antigens



or virulence factors derived from animal influenza viruses."

The *Vaccine* article predicted concerning the virus: "It will spread rapidly throughout the world. Several waves of infection will occur. Morbidity will be extensive in all age groups, and there will be widespread disruption of social and economic activity in all countries. Excess mortality will



Researchers have examined specimens of the 1918-19 virus

© TOUHIG SIDON/CORBIS SYGMA

be evident in most if not all age groups. It is unlikely that health care systems in even the most economically developed countries will be able to adequately cope with the demand for health care services."

Just how alarming is such a scenario? John M. Barry, author of the book *The Great Influenza*, provides this perspective: "A terrorist with a nuclear weapon is every national politician's nightmare. A new influenza pandemic should be."

What Treatments Are Available?

You may ask, 'Aren't there effective treatments now?' The answer involves both good news and bad. Antibiotics can cut the mortality from secondary bacterial pneumonias, and certain medications can be effective against some flu strains. There are immunizations that can be helpful in combating a flu virus if the correct strains of it are identified and if the immunizations can be produced in time. Such is the good news. The bad?

The history of flu immunizations—from

the ill-fated swine flu episode of 1976 to the production shortage of 2004—has been spotty. Even though medical science has realized momentous advancements since World War I, doctors still do not know of any cure for a powerful virus.

Hence, there is this disquieting question: Could there be a repeat of 1918-19? Note what is said in a paper from London's National Institute for Medical Research: "In some ways, conditions prevail as they did in 1918: there is a huge volume of international travel due to the development of transport, there are a number of war-zones with their inherent problems of malnutrition and poor hygiene, the world population has grown to six and a half billion and a greater proportion of this population is living in urban situations many of which have decaying infrastructures in terms of waste disposal."

Concludes a well-respected U.S. authority: "Put simply, each year brings us closer to the next pandemic." Does all this mean, though, that the future is bleak, even hopeless? No!

PANDEMICS WHAT THE FUTURE HOLDS

SOME students of the 1918-19 flu pandemic have been powerfully reminded of Bible prophecies. For example, Gina Kolata notes in her book *Flu—The Story of the Great Influenza Pandemic of 1918 and the Search for the Virus that Caused It*: “They called the plague of 1918 influenza, but it was like no influenza ever seen before. It was more like a biblical prophecy come true.”

Does the Bible actually say anything that bears on this human calamity? In fact, it does.

Bible Prophecy and Pestilences

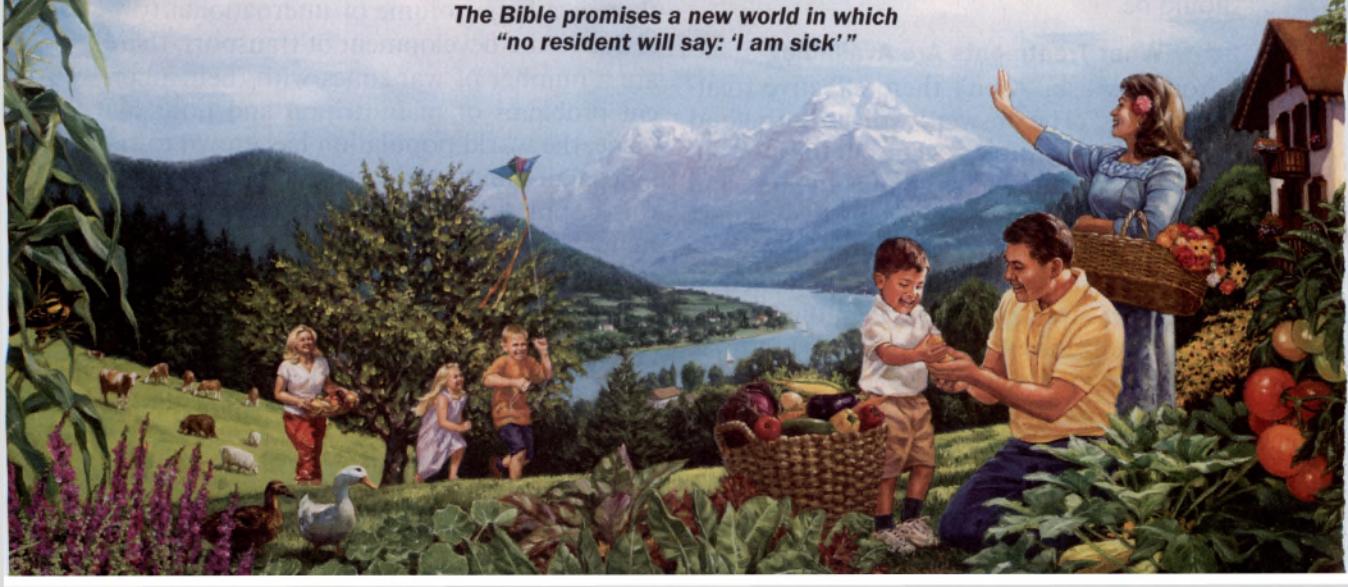
The disciples of Jesus Christ asked him for a sign of “the conclusion of the system of things.” (Matthew 24:3) Jesus answered by saying: “Nation will rise against nation, and kingdom against kingdom; and there will be great earthquakes, and *in one place after another pestilences*.” (Luke 21:7, 10, 11) The Bible also foretells that during the time of the

end, there will be “*deadly plague*.”—Revelation 6:8.

The Spanish flu epidemic began toward the end of the Great War (1914-18), later called World War I. That period saw the start of the fulfillment of Bible prophecies regarding “the last days.” These prophecies mention horrific food shortages, great earthquakes, increasing lawlessness, and a remarkable deterioration of human values. No doubt you are well aware of those very conditions in the world today.—Matthew 24:3-14; 2 Timothy 3:1-5.

The fulfillment of the prophecies involving “pestilences” and “deadly plague” has brought about immeasurable fear, misery, and loss of life. And according to the journal *Microbes and Infection*, “there is no reason to suppose that another pandemic will not occur at some future date. That this will happen, seems inevitable.”

***The Bible promises a new world in which
“no resident will say: ‘I am sick’”***



The Threat Continues

The journal *Emerging Infectious Diseases* of April 2005 says: “Optimists once imagined that serious infectious disease threats would by now be conquered.” The magazine adds, however, that “infectious diseases have continued to emerge and reemerge.” *Nature* magazine of July 8, 2004, notes the consequences: “About 15 million . . . annual deaths worldwide are estimated to be related directly to infectious diseases.”

“The emergence of AIDS led to renewed appreciation of the inevitability and consequences of the emergence of infectious diseases,” *Nature* explains. “In the 45 most affected countries,” reports UNAIDS, an AIDS program sponsored by the United Nations and other groups, “it is projected that, between 2000 and 2020, 68 million people will die prematurely as a result of AIDS.”

Within the past 25 years, AIDS has proved to be a devastating plague, killing over 20 million people. But the Spanish flu wreaked its devastation in a little over a year. Now, according to repeated warnings, the world appears long overdue for the emergence of a virulent form of influenza for which it is not prepared.

On May 19, 2005, Reuters Alert Net warned of the continuing appearance of new flu viruses, adding that these “pose a continuing and potentially growing pandemic threat.” *The Wall Street Journal* of the day before said: “The bird-flu virus currently active in Asia is known as H5N1 and was first spotted in Hong Kong’s poultry markets in 1997. It is unusual for its virulence—it kills as many as 80% of those who catch it.” The virus can reportedly infect people who come in close contact with infected animals.

The Future—Dismal or Bright?

Our prospects for a healthy future may not seem bright. When Jesus Christ spoke of pestilences during the last days, he cer-

tainly indicated that there is reason for concern. However, the Bible also gives us hope. For example, God made a promise to Noah and his family before the global Flood. First he warned Noah of the approaching devastation, but then he instructed Noah to build an ark, where he and others would find protection. (Genesis 6:13, 14; 7:1) The apostle Peter explained that “the patience of God was waiting in Noah’s days, while the ark was being constructed,” and that when the ark was completed, the survivors “were carried safely through the water.”—1 Peter 3:20.

Jesus Christ, who foretold much regarding the world conditions we see today, revealed that our era is similar to that of Noah. Those who trust in God as Noah did have the prospect of surviving a vast destruction. (Luke 17:26, 27) John, an apostle of Jesus, wrote: “The world is passing away and so is its desire, but he that does the will of God remains forever.”—1 John 2:17.

The present world system, then, will end. What kind of life will survivors enjoy? The apostle John was given a vision of the marvelous conditions that will exist on earth under the rule of God’s Kingdom: “[God] will reside with them, and they will be his peoples. And God himself will be with them. And he will wipe out every tear from their eyes, and death will be no more, neither will mourning nor outcry nor pain be anymore. The former things have passed away.”—Revelation 21:3, 4.

Your future need not appear bleak. If you learn about God and come to trust in him fully, you have a bright future ahead of you. The sure promise of God is that in his new world, the dead will be resurrected. (John 5:28, 29; Acts 24:15) And pestilence will be gone forever. In a prophecy that will find fulfillment in that new world, the Bible promises: “No resident will say: ‘I am sick.’”—Isaiah 33:24.



TWICE SENTENCED TO 25 YEARS OF SLAVE LABOR

AS TOLD
BY EFREM
PLATON

Late in 1951, I was sentenced for the second time to 25 years in a slave-labor camp. This time I was sent to the infamous Soviet camp in Vorkuta, above the Arctic Circle. Let me explain how I got there and narrowly escaped a violent end.

I WAS born on July 16, 1920, into a poor family in Bessarabia, in an area that is now the Republic of Moldova. My father died a short time before my birth, and Mother died when I was four. That left the six surviving children orphans. I am thankful to my older brothers, who played the role of parents to us younger ones.

As a youth, I was very interested in religious matters and was involved with the activities of our local Orthodox Church. In time, however, I grew disappointed with the church, especially with its priests, who blessed the efforts of nations during World War II, which began in September 1939.

Hostilities erupted in the early 1940's between Romania and the Soviet Union, and Bessarabia was caught in the middle. General Ion Antonescu, who then ruled Romania, reconquered Bessarabia. The authorities introduced a form of premilitary training for men 20 years and older. I was among those drafted. Our training took place at Boroșeni, not far from the village where my wife, Olga, and I lived.

Learning Bible Truth

During training, at our lunch break one day, I observed a group of men engrossed in

a lively discussion; I soon learned they were Jehovah's Witnesses. My short conversation with them led to many more. In time, I realized with great joy that I had found Bible truth, which I passed along to Olga and her parents.

The discussion that attracted my interest that day was on the matter of neutrality. The Witnesses concluded then that they needed to take a stand on the issue. Their decision was to participate in the instruction but refuse to take the oath of allegiance, which was a requirement to be drafted into the army.

I told Olga and her parents that I also intended to refuse to take such an oath, and they supported me in my decision. When it was time to be drafted—January 24, 1943—the moment came to give the oath of allegiance. Eight of us stepped forward toward the priests who were inducting the men. Instead of saying the oath, we said that we could not take part in war because we were neutral.

We were arrested and taken to the police station in Boroșeni. There we were so cruelly beaten that my wife hardly recognized me afterward. We were then transferred to Chișinău (formerly Kishinev), the country's principal city, to appear before a military court.

We had to walk some 90 miles, which took us 21 days because of the bitter cold. The eight of us were chained together and marched by armed soldiers, who provided us neither food nor drink. Each time we arrived at a new police station, we were beaten, and we stopped at 13 along the way! We survived because local citizens shared food and drink with us at the stations where we spent the night. In their acts of kindness, we recognized God's care for us.

Sustained Despite Discouragement

While in custody in Chișinău awaiting court-martial, the eight of us were again mistreated terribly. In an attempt to weaken our faith, the authorities told us that Witnesses from Zăicani, a village in northern Moldova, had denied their faith and had been allowed to return to their homes. Later we learned that they had only been sent home to await their respective court hearings. Also, a police officer, quoting a newspaper article, said that a military court in Ukraine had sentenced 80 Witnesses to death.

Some among the eight of us were getting discouraged, thinking they would never again see their children. We were promised that if we denied our faith, we would be released. To think about our future, we all were sent home for a week to be with our families. Afterward, only three of us kept our resolve to remain neutral.

On February 20, 1943, I was taken to the same police station in Boroșeni where I had previously been beaten so severely. There I met my two fellow Witnesses who had also maintained their resolve. Our joy at meeting each other again was great indeed! Later, we were taken to Bălți by a horse-drawn cart. During the trip, I became very sick, which turned out to be a blessing because we traveled the rest of the way to Chișinău by bus.

When we arrived, the guards recognized us as the three who had maintained their re-

solve. As an introduction we were once again beaten. A month later we were sentenced to 25 years in a slave-labor camp in Romania.

Baptized in a Bomb Crater

Eventually we were sent to Cugir, in Romania, where we worked in the forest cutting lumber. If we fulfilled a certain requirement, we received a little more food. Our group of ten Witnesses was industrious, so we ate better than we had in the prisons where we had been.

In 1944 the U.S. forces started bombarding the area near our camp. One day a bomb caused a huge crater near a little creek. The crater started filling with water, and before long there was a large pool. There, in September 1944, I was immersed in symbol of the dedication that I had made to Jehovah God more than a year and a half earlier.

Free at Last!

A few weeks later, the Russian army freed hundreds of Witnesses throughout the area, and we were able to return home. For the first time, I saw my son Vasile, who had been born in 1943 while I was in the labor camp.

By the time World War II ended in Europe in May 1945, Bessarabia had been annexed by the Soviet Union and had become the Moldavian Soviet Socialist Republic. The authorities did not immediately take action against our Christian activities. However, they noted that we did not vote, and the Soviet State interpreted this as a very serious offense.

In 1946 we had our second son, Pavel, and in 1947, our daughter, Maria, was born. How we enjoyed our family life together! But about two years later, tragedy struck. Our little Maria got sick and died suddenly. She was buried on July 5, 1949. But that was only the beginning of our sorrows.

Exiled to Siberia

Only hours after we buried Maria, during the darkness of the following morning,

**Jehovah's Witnesses in the
Vorkuta slave-labor camp**



three soldiers woke us up. They informed us that we were to be deported because of our "anti-Soviet behavior." We were allowed to take some food and clothing, and on July 6, 1949, we were transported some 2,500 miles to Kurgan, in Siberia, just north of Kazakhstan.

The trip took 18 days. We were transported like cattle, in railway cars. Only twice on the way were we given some food. We managed our provisions carefully so that they lasted for the duration of the trip. All in our boxcar were Jehovah's Witnesses. We kept spiritually active each day by having many Bible discussions. The most precious possession we had was a copy of the Holy Scriptures.

When we finally arrived at Kurgan, we found that although we lived in a labor camp, there was some freedom of movement. I was able to work in a blacksmith shop and could talk to my fellow workers about my Bible-based hope. Two years later, on September 27, 1951, I was arrested and taken to court again. The prosecution presented 18 people who said that I had foretold the destruction of the State. Actually, I had used the prophecy at Daniel 2:44 to show that all human governments are going to be replaced by God's Kingdom.

In addition, the authorities had searched our living quarters and found a *Watchtower* magazine that had been sent secretly from Moldova. Generally, the authorities would find either handwritten copies of magazines or locally made reproductions. This one, however, was produced outside the Soviet Union. Thus, I received my second sentence of 25 years at forced labor. This time I was sent to work in the coal mines of Vorkuta, an infamous slave-labor camp at the north end of the Ural Mountains, above the Arctic Circle.

Escaping Death in Vorkuta

Vorkuta was a huge prison complex made up of 60 forced-labor camps. In our camp alone, there were over 6,000 laborers. The combination of subzero temperatures, inhuman living conditions, and underground coal mining wreaked havoc on many lives. Almost every day there were new dead that had to be disposed of. My health became very poor, so that I was unable to do hard physical work. I was assigned so-called lighter work, shoveling coal into waiting wagons.

Conditions were so bad in Vorkuta that the miners organized a strike, but it developed into a full-scale revolt. The miners even set up their own administration and organized a force of some 150 men to resist if troops should arrive. They wanted me and the nearly 30 other Witnesses to be part of their "army." But we refused.

The revolt lasted two weeks until armed forces arrived and shot the rebels en masse. We were told that the rebels had planned to hang us right there in the workshop! Happily, they did not succeed in their plans. Considering the systematic efforts of the Soviets to break our faith, you may understand why we attributed our survival to our great God, Jehovah!

Using More Freedom to the Full

Stalin's death in March 1953 brought about a positive change to our situation. In 1955,



I was released from Vorkuta and allowed to return to my family, who still lived in the forest camp in Kurgan. There we continued to witness to the local people about our wonderful hope.

By the year 1961, we desired to move to a new preaching territory. So we wrote a letter to the leader of the country, Nikita Khrushchev, requesting that we be allowed to move, since there were no schools for our children—which was true. We were granted permission to move to the small town of Makushino, where there was also a labor camp. What joy we had in helping four large families there to become dedicated servants of Jehovah!

Finally, in 1965, I was released from this camp. Although we were not yet allowed to return to Moldova, we could move elsewhere in the Soviet Union. The following year we left for Qostanay (formerly Kustanai), in Kazakhstan, where there were already two congregations of Witnesses. Since this territory became rather well covered in the witnessing work, three years later we moved to Chirchik, in Uzbekistan. By that time our sons Vasile and Pavel were married. So we concentrated on the spiritual growth of our remaining children—Dumitru, aged 10, and Liuba, aged 7.

We lived in Uzbekistan for ten years, during which time we were also able to help others come to know Jehovah. In 1979 we moved more than a thousand miles west to the city of Krasnodar, near the Black Sea in southern Russia. There Olga and I served for two years in the full-time min-

istry as pioneers, and we were able to assist others to become Witnesses.

Return to Moldova

Finally, during the summer of 1989—40 years after being sent into exile—we decided to return home to Moldova. Immediately, we again became pioneers, serving as such until 1993. There, we were able to assist over 30 persons to become active Witnesses of Jehovah. My heart swells with joy when I consider how richly Jehovah has blessed us as a family! Sadly, though, my dear wife died in May 2004.

Yet, I am comforted that all 4 of our children, as well as 14 of our grandchildren and 18 of our great-grandchildren, are active servants of Jehovah. True, we had a difficult life, but how wonderful it is to know that Jehovah helped us to remain faithful to him during our trials!

As I have grown older, ill health and advancing age have limited what I can do in the ministry. Still, I do my best. I have learned that no matter what challenges we may face in life, Jehovah is always there to provide the strength and encouragement we need.*

* Efrem Platon died on July 28, 2005, as this article was being prepared for publication.



With Olga
in 2002

Bible Stories Told in ICE and SNOW

BY AWAKE! WRITER IN GERMANY



ABSOLUTELY fantastic!" That is how Anja described her impressions. Georg said, "It is amazing what you can create from this material." With our curiosity aroused, a group of us went to Lübeck in northern Germany to see Ice World, an ice sculpture festival. Its theme was "The Bible—Stories From the Old Testament and the New Testament."

When we arrived in Lübeck, the famous Holstein Gate lay under a blanket of rain clouds. Just a few steps away stood

an ordinary-looking marquee. But inside we were greeted by a colorful, sparkling world of snow and ice shaped into figures of translucent ice glinting with changing colors.

Even before we could start our tour, we remembered that we had been warned to dress warmly—it was cold inside! While 14 degrees Fahrenheit may be mild to an inhabitant of cold regions, a couple of us were distressed upon realizing that we had forgotten our scarf and gloves. The sight of the colorful, fascinating figures in ice, however, made up for our discomfort.

Bible Scenes in Ice

We saw an angel, with fine folds in his garment, blowing a trumpet. The sculpture seemed to hover over the snowy ground. There was an ice display of the various stages of creation, including the creation of Adam. Farther along, we came to Noah's ark. We had to smile when we saw the hippopotamus trying to push its partner through the ark's door while a little ice rodent appeared to be sneaking into the ark under the belly of the hippo that was stuck. Nearby was Noah standing next to a pile of ice wood.

We next came to a scene in the garden of Eden, depicting the sin of Adam and Eve. Then we stopped at a huge figure that we were eager to examine more closely: Moses with the two tablets of the Law in his hand.

What was it that especially drew our attention to this?

On the ice tablets was written, not the Ten Commandments, but the Tetragrammaton—God's

The Hebrew form of God's personal name, Jehovah, was featured on the exhibition brochure



personal name, Jehovah! We were thrilled to see God's name in its Hebrew form so prominently displayed. The exhibition brochure even showed this figure of Moses on its cover, with the eye-catching Tetragrammaton right in the middle. We took quite a few pictures of the scene. Nearby was a statue of a calf that glinted golden under a spotlight. To us it was a reminder of the immoral idolatry that the Israelites engaged in so soon after their deliverance from Egypt.

Unfortunately, the snow mural of Jacob and Esau and the one of Joseph and Pharaoh were difficult to recognize. After all, some murals suffered deterioration because of exposure to some 100,000 visitors in the first three weeks of the exhibition. Yet, this was not the case with the large image of Samson, who was pulling down the pillars of the Philistine temple. Another scene portrayed him at the time when Delilah had his hair cut off.

The Bible character David was also featured, first when he defeated Goliath and then when he failed to resist watching Bath-sheba bathing. In another corner was a depiction of Jesus' birth. It was opposite the snow scene that portrayed the Last Supper.

After looking at all these sculptures, we were fro-

zen. So we exited to the café in the adjacent Holstein Hall. A video about how the sculptures were made was shown on several screens in the hall.

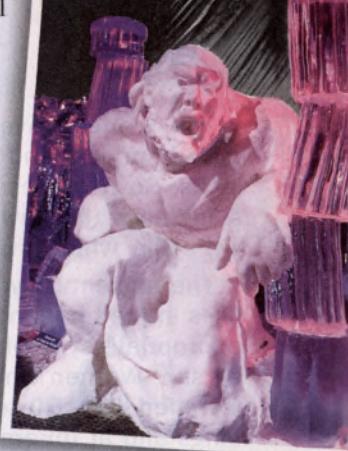
Making the Displays

Initially, 350 tons of crystal-clear ice in blocks of about 6 feet by 3 feet by 2 feet had been trucked from Belgium and had been stacked on top of each other, in accordance with the future size of the sculptures. Snow cannons had produced 200 tons of snow and blown it into huge boxes. With the help of chain saws, chisels, toothbrushes, and straws, the sculptors had transformed the ice and snow into scenes based on the Bible.

According to project leader Jana Kürbis, the main challenge had been to create and maintain the right climatic conditions. But all the work that went into the project was greatly appreciated. One woman exclaimed: "Unbelievable!" A man commented that the exhibit was "really super." His wife, however, regretted that she knew so little about the Bible.

Many, including young ones, went from display to display reading a printed description of the background of the Bible scenes depicted. When we left the Ice World festival, we took along not only several rolls of exposed film but also lasting impressions of the Bible stories told in snow and ice.

Samson pulling down the pillars of the Philistine temple



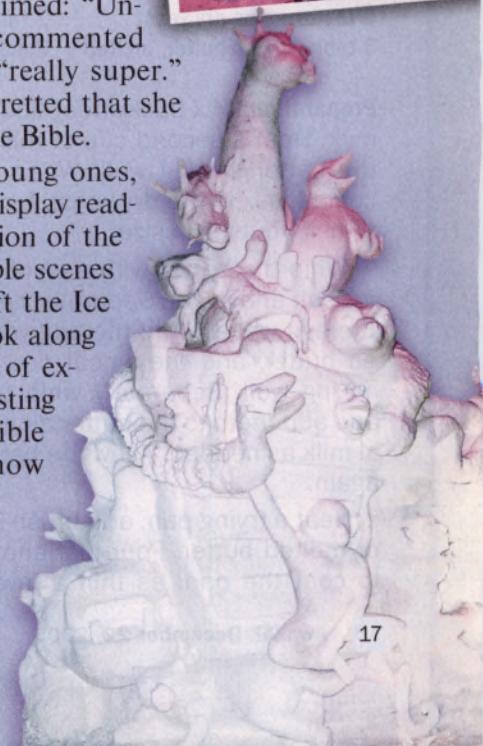
David and Goliath



Creation of Adam



Noah's ark



Russian Blini

More than just pancakes

The French have their crepes, the Scots their bannock, and the Americans their flapjacks. So it comes as no surprise that Russians have their own version of the pancake—the blin, which is a staple with a long history.

The ancient Slavs used blini for food sacrifices in their pagan rituals and saw in blini an appropriate symbol of the round, warm, golden sun. Women who had recently given birth were fed blini. These were also served at weddings and at funerals, so they figured in peoples' lives from birth to death.

Russians today usually make blini with wheat flour, but other flours can also be used.

RECIPE FOR BUCKWHEAT BLINI

Ingredients

1 cup buckwheat flour	2 eggs
1 cup wheat flour	3 cups or so of milk
2 tablespoons dry yeast	2 tablespoons sugar
3 tablespoons butter, melted	Pinch of salt

Preparation: Mix buckwheat flour with a cup of milk. Heat a second cup of milk, and add it to the batter, mixing well. When the batter has cooled, mix in the dry yeast. Let the batter rise until it doubles in size.

Whip the batter with a wooden spoon, adding salt and sugar. Separate the egg yolks from the egg whites. Add the egg yolks, warm melted butter, and the wheat flour to the batter, mixing well. Separately whip the egg whites, and add them to the batter along with additional milk as needed. Allow the batter to rise once again.

Heat a frying pan, and brush it lightly with oil or melted butter. Pour just enough blin batter to coat the pan, as thin a layer as possible.

The batter is generally prepared with milk or water or a mixture of both. But the batter can also be made with cream, buttermilk, kefir, sour cream, or any other milk product. Frying blini is considered an art because each blin should be as thin as possible—a goal not easily achieved!

Making the filling is said to be a science. The filling can be a homemade jam, such as raspberry, strawberry, blackberry, red or black currant, or cranberry. Or the filling can be anchovies, herring, salmon, sardines, sprats, mushrooms, minced meat, or cottage cheese—served separately or in combinations. But the classic Russian filling is red or black caviar. And remember, blini taste best when they are hot off the griddle!

Cook over low heat until the underside of the blin is golden. Turn the blin over, and cook it for 15 seconds more. Transfer to a plate, and keep the blin warm while repeating the steps with the remaining batter. Serve the blini stacked.



Young People Ask . . .



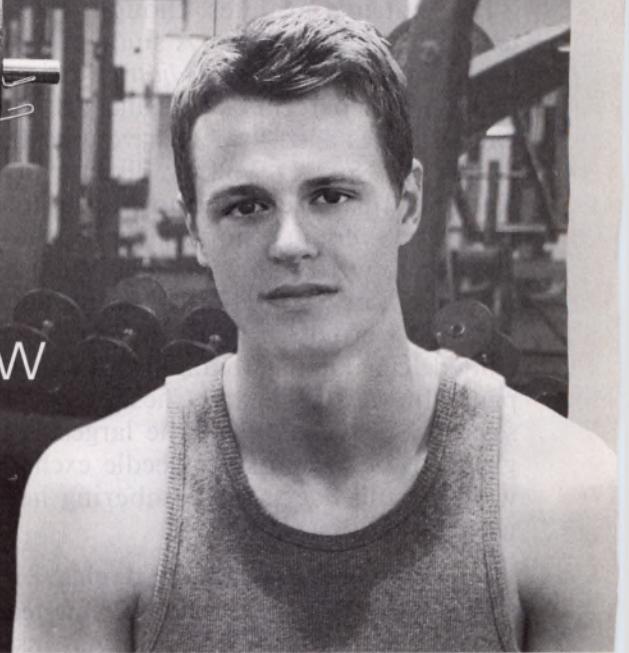
What Should I Know About Steroids?

"I do think about it [the consequences of taking steroids] . . . How long am I going to live? . . . But like, it's what I want now."—John, a weight lifter.

ARE you unhappy with your appearance? Would you like to have the muscular body of a star athlete or the lean figure of a top model? Do you take sports seriously and want to improve your strength and speed?

If you answered yes to any of the above, then you may be tempted to take some of the pills or potions that your peers promise will help you to achieve your goals more quickly. The journal *American Academy of Family Physicians* states: "Approximately 1 million adolescents [in the United States] between the ages of 12 and 17 years have taken potentially dangerous performance-enhancing supplements and drugs."

The most popular performance-boosting drugs are known as anabolic steroids. What are they? Why do people take them? And how can you resist their appeal?



Giving Nature a Boost

"Anabolic steroids," explains a report from the U.S. Department of Health and Human Services, "is the familiar name for synthetic substances related to the male sex hormones (androgens). They promote the growth of skeletal muscle (anabolic effects) and the development of male sexual characteristics." During puberty in males, a finely tuned, pre-programmed increase in these sex hormones prompts the physical changes that transform a boy into a man.—Psalm 139:15, 16.

Synthetic steroids were first developed in the 1930's to treat males who failed to produce enough of these hormones naturally. Today, steroids are used to counteract the wasting away of the body caused by HIV and other diseases. However, steroids have found a market among those who do not have legitimate medical needs. In the 1950's,

steroids became available on the black market, and ambitious athletes began tapping the performance-boosting potential of these drugs.

It is not just athletes, though, who are tempted to take steroids. A study published in the medical journal *Pediatrics* estimates that almost 3 percent of boys and girls in the United States aged 9 to 13 have used these drugs. Dr. Nora D. Volkow, director of the National Institute on Drug Abuse, told a recent U.S. congressional hearing that in 2004 there were "an estimated 79,000 high school seniors who [reported] having abused anabolic steroids in the past year." In the United Kingdom, steroid abuse is also rampant. "In Merseyside and Cheshire in 2003," says the *New Statesman*, "the largest single group of new clients for needle exchanges were steroid users, outnumbering heroin users for the first time."^{*}

What Is the Appeal of Steroids?

Why the rise in steroid abuse? One reason is that successful athletes can win instant

* Steroids are often injected into the body, putting those who share needles at higher risk for contracting HIV or other blood-borne diseases.

**Some young women
take steroids to
alter their figure**



fame and a huge fortune. Steroids seem to offer a shortcut to this gold mine. A prominent sports coach summed up a dominant attitude of many when he said: "Winning isn't everything—it's the only thing." Volkow, mentioned above, observed: "We are now facing a very damaging message that is becoming pervasive in our society—that bigger is better, and being the best is more important than how you get there."

A survey conducted by Bob Goldman, a physician specializing in sports medicine, appears to confirm this grim conclusion. He asked young athletes if they would take a banned performance-enhancing drug under the following conditions: They would not be caught, they would win every competition for the next five years and, afterward, they would die from the side effects of the drug. More than half the youths responded with a yes.

Even if you do not have a win-at-all-costs mentality, steroids may still have a seductive appeal. Why? "People choose to take steroids," says Volkow, "because [steroids] do, in fact, enhance certain types of physical performance and appearance." In many cultures today, physical appearance is paramount. Dr. Harrison Pope, professor of psychiatry at Harvard Medical School, claims: "Millions of men are suffering shame, self-doubt and embarrassment because of emphasis on body image." Steroids offer young men the chance to hide their self-doubt under a fashionably muscular body.

For similar reasons girls also are vulnerable to the lure of steroids. Charles Yesalis, professor of health and human development at Pennsylvania State University, said regarding steroid abuse: "There's been a substantial increase for girls during the 1990s, and it's at an all-time high right now." Some girls take steroids to be stronger and faster on the sports field. Most, though, seem to take them in the hope that the drugs will transform their bodies into the lean, taut figures flaunt-

ed by today's models and movie stars. "With young women," says Jeff Hoerger of Rutgers University in New Jersey, "you see them using it more as a weight control and body fat reduction [method]."

Consider the Risks

If you are ever tempted to take nonprescribed steroids, it is worth considering the following facts. A person who takes them for even a short while increases the risk of heart attack, liver failure, kidney failure, and serious psychiatric problems. Females who take steroids risk menstrual abnormalities, increased growth of body hair, male-pattern baldness, and a permanently deepened voice. On the other hand, males who take steroids may develop breasts and will likely discover that their testicles start to atrophy. Both males and females may experience sudden bouts of aggressiveness. And, ironically, steroids can stunt growth if taken during adolescence.

If you are a youth who wishes to please Jehovah God, what Bible principles bear on the illicit use of steroids? The Bible plainly states that your life is a gift from Jehovah. (Acts 17:25) As the above facts show, a youth who abuses steroids will likely damage his health. Therefore, ask yourself, 'Would I be showing appreciation to Jehovah for my body—which is "wonderfully made"—if I took substances that ultimately damaged it?'—Psalm 139:14.

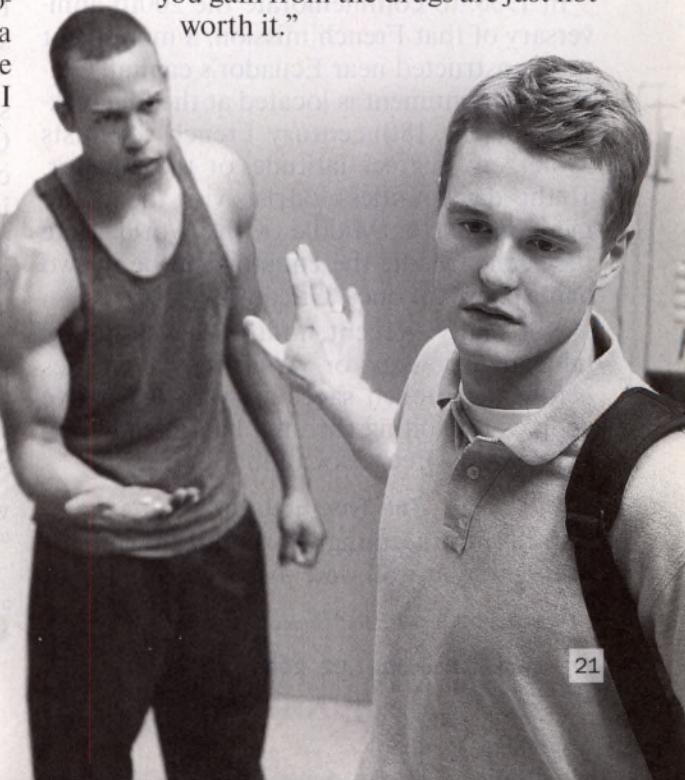
Another fact to consider is that steroids make a person prone to outbursts of rage. Wise King Solomon observed: "Anyone disposed to rage has many a transgression." (Proverbs 29:22) The apostle Paul warns that those who allow anger to dominate their personality will not inherit God's Kingdom. (Galatians 5:19-21) Are the short-term payoffs of taking steroids worth these risks?

What if you are tempted to take steroids to boost your athletic performance? The Bi-

ble requires that we conduct ourselves "honestly in all things." (Hebrews 13:18) If you attain any athletic success because of steroid abuse, are you being honest with your fellow competitors or with yourself?

Remember that although some of your peers may judge you by your physical appearance or performance, Jehovah assesses people differently. To him it is not the shape of your body that determines your true worth. When selecting David to be king of Israel, Jehovah told Samuel the following regarding David's more impressive-looking brother: "Do not look at his appearance and at the height of his stature, for I have rejected him. For not the way man sees is the way God sees, because mere man sees what appears to the eyes; but as for Jehovah, he sees what the heart is."—1 Samuel 16:7.

Whether you are a servant of Jehovah or not, it makes sense to resist the lure of steroids. An American college football player offers this practical advice: "If you want to avoid pressure to take steroids, be careful who you associate with. Any 'benefits' you gain from the drugs are just not worth it."





BY AWAKE! WRITER IN ECUADOR

Amazing Discoveries at Earth's Equator

DEBATE over the exact shape of the earth raged at the prestigious Academy of Sciences of Paris in 1735. Supporters of Isaac Newton's theories concluded that the earth was a sphere with slightly flattened poles. Supporters of the Cassini school of thought said that the flattening occurred at the equator.

Therefore, in 1736, two expeditions were sent to measure the earth's curvature. One went to Lapland, headed toward the North Pole, and the other went to present-day Ecuador, to the equator.* The investigation proved Newton's supporters to be correct.

In 1936, to commemorate the 200th anniversary of that French mission, a monument was constructed near Ecuador's capital, Quito. The monument is located at the line reckoned by the 18th-century French scientists to be zero degrees latitude, or the equator. To this day countless tourists visit the monument, called the Middle of the World. Here they can straddle the equator and be in two hemispheres at once. Or can they?

Not really. Recent findings have slightly relocated the equator. Amazingly, centuries before the French sages arrived, the native peoples inhabiting the area had already pinpointed this precise location. But how?

The True Equator

In 1997 the seemingly insignificant ruins of a semicircular wall were discovered on top of

* "Ecuador" is Spanish for "equator."

Mount Catequilla, which lies a little to the north of Quito. Using the satellite technology of the Global Positioning System (GPS), investigator Cristóbal Cobo discovered that one end of this wall was located precisely on the equator.*

The wall's alignment with the true equator might have easily been brushed aside as coincidental. However, a line connecting the two ends of the wall creates a 23.5-degree angle to the equator. This is almost precisely the angle at which earth's axis is tilted!** Further, one end of the connecting line points to the rising of the sun on the solstice in December; and the other end, to the setting of the sun on the solstice in June. More discoveries followed.

Using a theodolite on top of Catequilla, researchers noted that the pre-Inca pyramids of Cochasquí were aligned at an angle that coincided with the rising of the sun on the solstice in June.[▲] Significantly, Pambamarca, another archaeological site, is found at an angle that coincides with the rising of the sun on the solstice in December.

Could it be that Catequilla was used as the hub of astronomical observation? Were other sites specifically built in line with astronomical calculations obtained from this hub?

* On the other hand, GPS places the famous Middle of the World monument some 1,000 feet to the south of the true equator.

** Exact tilt is 23.45 degrees.

[▲] The Incas invaded what is now Ecuador and occupied it for a relatively brief period—from approximately 1470 to 1532, the year in which the Spanish colonial period began.

Further Amazing Discoveries

As more astronomical alignments were plotted on a map, a figure began to emerge—an eight-pointed star. This figure is found on ancient ceramics and has often been explained as a simple representation of the sun, since early inhabitants of this land were sun worshippers. Ceramic fragments excavated on Catequilla have been analyzed and were found to date back nearly a thousand years. To this day the indigenous tribes weave an eight-pointed star into their tapestries and clothing, as their ancestors apparently did. However, their ancestors may well have attributed more to this figure than is commonly suspected.

The Quitsa-to Project, directed by Cobo, is amassing compelling evidence of the astronomical acumen of the early natives.* More

* "Quitsa-to" comes from the language of the Tsáchila Indians and means "middle of the world." Some believe that Quito is a name derived from this term.

than a dozen archaeological sites and many ancient towns have been found to line up perfectly along the astronomical star figure when it is superimposed over the equator with Catequilla at its center.

Even more astounding is the fact that the location of the then undiscovered ruins was predicted. How was this done? In September 1999 the Quitsa-to Project recommended that excavations be made in the Altamira sector of Quito, on one of the 23.5-degree spokes from Catequilla. There, a great necropolis was found, along with numerous ceramics from colonial, Inca, and pre-Inca periods.

Some of the Catequilla radii also fall across churches built during the Spanish colonial era. Cobo explains that in 1570 the council of Lima insisted on building "churches, convents-monasteries, chapels and crosses upon all the pagan 'guacas' and worship places of native people." Why did they do this?

The Solstice and the Equinox

Because of the earth's 23.5-degree tilt, the sun does not rise and set in the same place each day. Rather, it gradually migrates north and south of the equator. Of course, this is an apparent migration of the sun, since it is the earth that changes its position throughout its year-long trip around the sun.

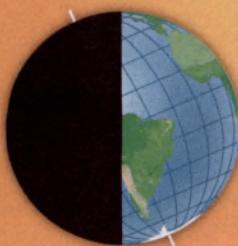
Once a year, when earth's orbit positions the planet's axis at full tilt toward the sun in the Northern Hemisphere, the sun will rise at its farthest

northerly point: 23.5 degrees to the north of the equator. This occurs about June 21. When the Southern Hemisphere is at its maximum tilt toward the sun, the sun rises at its farthest southerly point: 23.5 degrees to the south of the equator. This occurs about December 21. These two extreme points are referred to as solstices. "Solstice" means "motionless sun."

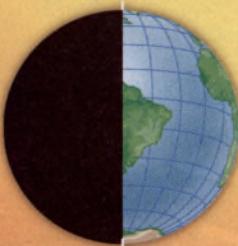
Midway between the solstices, however, the sun is

aligned vertically above the equator of the earth. This occurrence is known as an equinox, which means that day and night are of equal length everywhere on earth. About March 20 and September 21, the sun rises exactly in the east, follows the equator for 12 hours, and sets exactly in the west. At midday on an equinox, the sun is at its zenith over the equator and no objects will cast a shadow there.

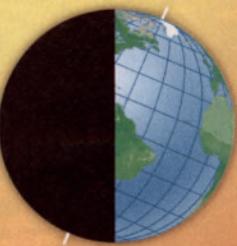
Solstice
December 20, 21, 22, or 23



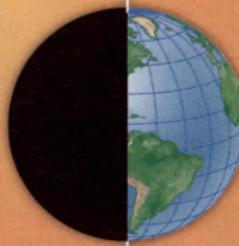
Equinox
March 19, 20, or 21



Solstice
June 20, 21, or 22



Equinox
September 21, 22, 23, or 24



Well, these places of worship were considered heathen by the Spanish Crown. So they were destroyed, and Catholic churches were built on the original sites. Building churches on ancient sun temples made it easier to convert the natives to Catholicism.

The Church of San Francisco in the old colonial sector of Quito lies on one of the Catequilla radii. It was built in the 16th century upon a pre-Inca structure and was constructed in such a way that the rays of the rising sun of the solstice in December penetrate the cupola of the church, striking a triangle above the altar. As the sun rises farther, the light beam progresses downward and creates a brilliant glow on the face of an image entitled "God the Father." This effect occurs precisely on the December solstice! In other local churches, such sunlight displays were also incorporated into the architecture for the purpose of converting the sun-worshipping natives to Catholicism.

How Did They Know?

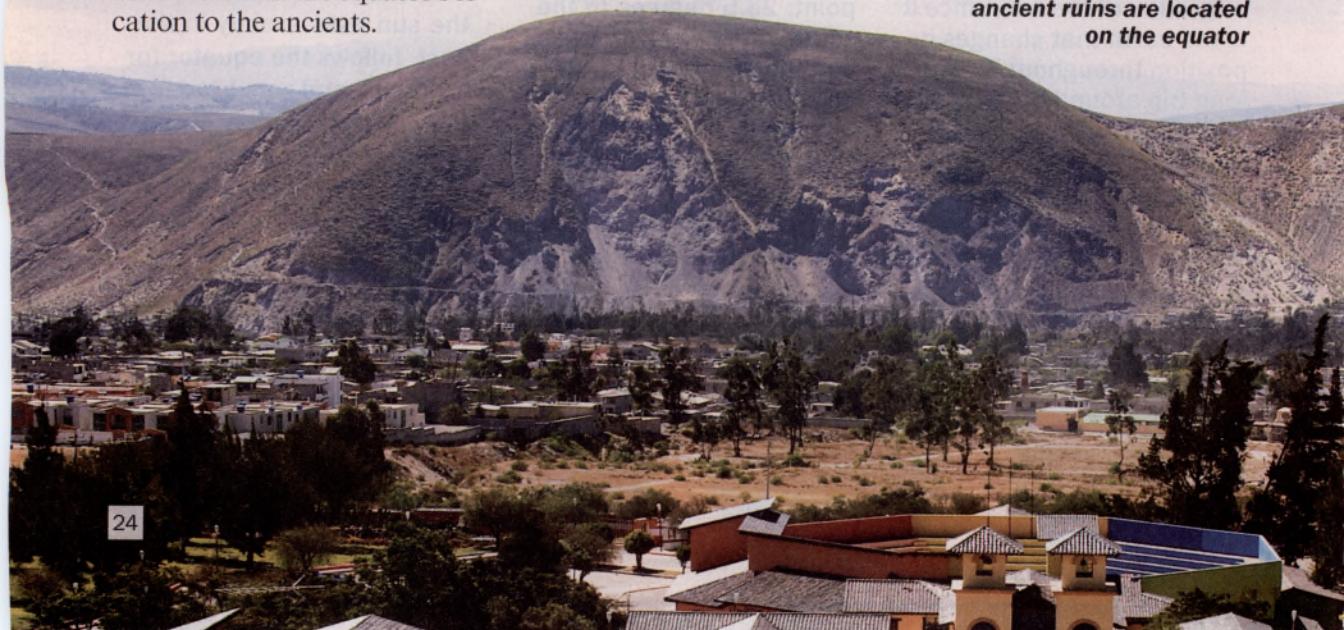
How could that ancient civilization have known that Catequilla was the "middle of the world"? There is only one place where objects cast no shadow at midday on the equinoxes: the equator. So the Quitsato Project proposes that careful observation of shadows would have indicated the equator's location to the ancients.

Furthermore, Mount Catequilla is a natural astronomical observatory that would not go unnoticed by people who worshipped the sun. The mountain rises a thousand feet from its base and lies between the eastern and western ranges of the Andes Mountains. Therefore, the rising and setting of the sun each day would have definite points of reference against the spectacular backdrop of the Andes. For example, the magnificent snow-capped volcanoes Cayambe and Antisana pierce the eastern horizon with their three-mile-high peaks—conspicuous markers for monitoring solar movement.

Mount Catequilla also offers an unobstructed 360-degree view of about 20 ancient towns and some 50 archaeological sites, all visible without the use of optical instruments. Moreover, both the southern and northern skies are visible from Catequilla because of its position on the zero degree parallel. Thus, Catequilla can be called the true middle of the world, for there is no other place on the equator that offers all these advantages at an altitude of over 10,000 feet above sea level.

The greater part of the equator passes through ocean or tropical jungle, where vegetation obstructs celestial observation. Ad-

Mount Catequilla, atop which ancient ruins are located on the equator



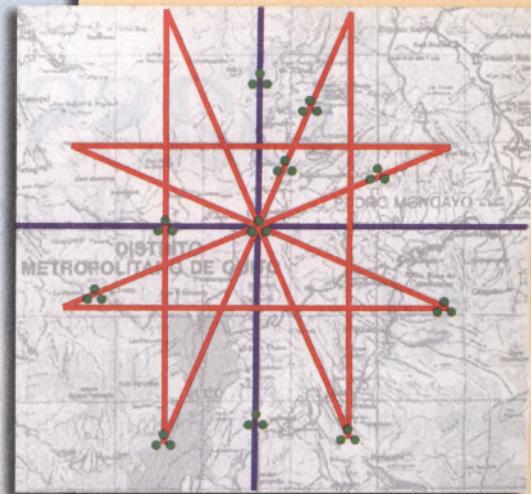
ditionally, such vegetation does not provide stable points of reference from which to draw conclusions, since the foliage is in constant change as it grows and dies. Only in Kenya are there mountains near the equator, but these are not flanked on either side by mountain ranges, as is Catequilla. Yes, Catequilla occupies a privileged location, uniquely suited to astronomical observation.

Who Were They?

Who were these ancient astronomers? The Quitsato Project suggests that indigenous tribes, such as the Quito or Cara, might have been the original possessors of this knowledge. However, the project is still in its infancy, and much remains to be learned.

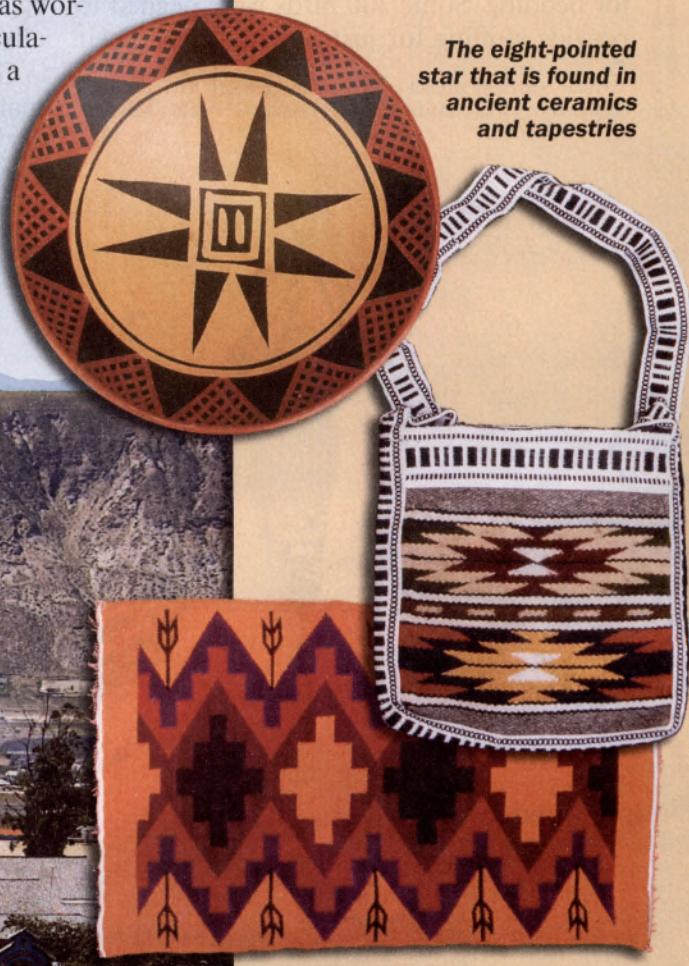
Yet, some basic precepts of the early inhabitants are evident. Understanding the sun's apparent movements would be necessary for formulating calendars useful to agriculture. Since the sun is crucial for sustaining life, it is no wonder that the sun was worshipped. Thus, solar observation and calculations were taken from a secular level to a sacred level.

Religious zeal evidently motivated the people to study meticulously the heavens and their luminaries. Over the centuries their studies apparently resulted in an impressive accumulation of astronomical knowledge that is only now being revealed through the amazing discoveries surrounding Catequilla.



Many archaeological sites and ancient towns line up perfectly along the astronomical star figure

The eight-pointed star that is found in ancient ceramics and tapestries



Bass Rock

Where Gannets Gather

BY AWAKE!
WRITER IN BRITAIN

MAMMOTH Bass Rock is some 350 feet high and about a mile in circumference. It stands offshore northeast of Edinburgh, Scotland, at the entrance of an estuary called the Firth of Forth. It is home to perhaps as many as 100,000 northern gannets, one tenth of the world population of this fascinating seabird.*

In the early 20th century, gannets were harvested as food. Their fat was used for medicinal purposes, and their feathers were valued for bedding. Some 300 birds were needed to provide stuffing for just one mattress. Their



eggs, once viewed as a delicacy, are not generally considered palatable today.

Gannets may live for 30 years and usually mate for life. They are migrants, and in January they return to their same nest sites, which they defend vigorously. On Bass Rock these nests, made of seaweed and grass, are packed

* The northern gannet's Latin name reflects its Bass Rock origin. Today it is classified as *Morus bassanus*, or *Sula bassana*.



together, some two to three feet apart. The birds prefer windswept sites, which enable them to make vertical takeoffs and landings.

Gannets are intriguing to watch. Sky-pointing—stretching the neck with the beak pointing into the air—indicates that the bird is about to fly off. Bending low—facing another bird with outspread wings—is a warning that it is prepared to defend its nest. Mating pairs fence with their beaks, and the female submits when her mate lightly bites her neck. Gannets breed one chick a year, and either parent will incubate the egg by placing a webbed foot on it to keep it warm.

The adult gannet is white, with distinctive black tips on its wings, which can span six feet. The fledgling, in contrast, is black, flecked with small white spots. Within 12 weeks of hatching, the guga (as the young gannet is called) is heavier than its parents. It is equipped with extra layers of fat to fuel its eventual migration.

The young gannet begins its independent life when it first plunges into the sea, where it paddles on its own. However, most young ones do not survive the plunge, which amounts to a slide down the cliff face during which a wing or a leg is often broken. Those birds that alight safely on the water instinctively learn to fish. Eventually they migrate, often as far as West Africa, and they may not return to Bass Rock for three or four years.

The way gannets dive into the sea to fish is a wonderful sight. They reach speeds of 70 miles an hour. Just before they plunge into the water from 100 feet or so, their wings are drawn back to form an arrowhead and their nostrils are sealed. A protective membrane covers their eyes. At the same time, air sacs beneath the skin cushion the body from the shock of the impact, which may be so violent that spray is hurled high into the air. Fish are sometimes stunned by the impact.

When gannets are underwater, they use their wings and feet to weave about in catch-

Diving gannets reach speeds of 70 miles an hour

© NHPA/Bill Coster

ing their prey. They dine on mackerel, sprats, herring, and sand eels. They may fish for 30 hours or so at a time. Some gannets are known to fish as far east as the coast of Norway.

Bass Rock is also home to some ten other species of seabirds. But these are faced with the ever-expanding gannet colony, and they are hard-pressed to maintain a foothold. In times past, from about the 1400's, Bass Rock was used by humans as a retreat for prayer and meditation. Later it was fortified and, for a time, became a penal colony. Although the lighthouse erected in 1902 is no longer manned, it still beams its warning light across the estuary.

The lighthouse keeper's garden has long since returned to the wild, and now the gannets reign supreme. Popular boat excursions from the small port of North Berwick take visitors around the island for a close-up of the birds. It is a delightful trip—if it is a calm day.

Even during the roughest storms, however, visitors need not be disappointed—thanks to modern technology. A special video presentation at North Berwick's Scottish Seabird Centre covers every aspect of life on Bass Rock. So whatever way a visitor chooses, he may watch these extraordinary divers of Bass Rock. The experience truly is memorable.

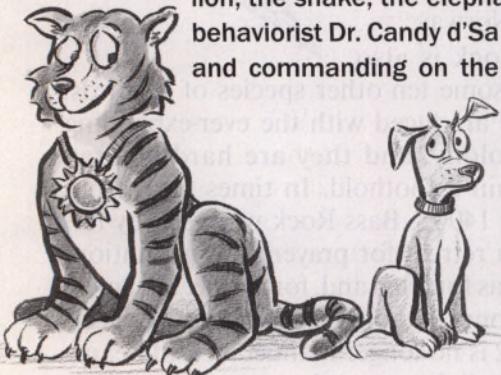
In Our Next Issue

- What Will the Future Bring?
- Why Look to the Bible for Guidance?
- Sustained by My Faith
—Living With ALS

Watching the World

The World's Favorite Animal

"The dog might be man's best friend, but the world's favorite animal is the tiger," reports *The Independent* of London. After a series of documentaries, each featuring one of ten animals, a poll of over 52,000 people from 73 countries put the tiger ahead of the dog by just 17 votes. In third place was the dolphin, followed by the horse, the lion, the snake, the elephant, the chimpanzee, the orangutan, and the whale. Animal behaviorist Dr. Candy d'Sa explained that humans "can relate to the tiger, as it is fierce and commanding on the outside, but noble and discerning on the inside. In contrast, the dog is a loyal and respectful creature and brings out the lighter, more communicative side of human nature." Conservationists welcomed the tiger's victory. Calum Rankine, of the World Wide Fund for Nature, said: "If people are voting for tigers as their favorite animal, it means they recognise their importance, and hopefully the need to ensure their survival." It is estimated that only 5,000 tigers remain in the wild.



Sleeping Habits

"People in Asia burn the midnight oil, sleeping later than most Americans and Europeans and waking up earlier, a global survey on sleep habits has found," reports the news channel Al-jazeera. More than 14,000 people in 28 countries were asked when they usually go to bed and when they get up. In Portugal, 3 out of 4 people go to bed after midnight. Asians are the earliest out of bed, led by Indonesia, "where 91% said they are out of bed by 7am." The Japanese sleep the least. Over 40 percent get six hours of sleep or less each night. At the other end of the list are the Australians. Not only do they have the high-

est number of those who go to bed before 10:00 p.m. but almost a third of the respondents there said that, on average, they get more than nine hours of sleep each night.

Stop Smoking Now!

"About half to two thirds of all persistent cigarette smokers will eventually be killed by their habit," says a report in *BMJ*, a British medical journal. Not only did researchers find that cigarette smoking was substantially more hazardous than they had previously thought but they also found that it completely nullified any benefits smokers might have experienced "for increased longevity over the past half century." While the study indicated an

increase to 33 percent in the probability that lifetime non-smoking 70-year-olds would reach age 90, the likelihood of smokers reaching that age actually declined from 10 percent to 7 percent. "On average, cigarette smokers die about 10 years younger than non-smokers," the article states, and quitting the habit could increase life expectancy. The sooner smokers stop, the better. Fifty-year-olds were found to halve the hazard by quitting, and those stopping at age 30 could avoid almost all of it.

Bible Illiteracy

A recent Internet poll in Britain by the polling company YouGov "found that more than a quarter of those it

polled do not know that Bethlehem was the birthplace of Jesus Christ," reveals London's newspaper *The Guardian*. "And only three-quarters realised that Jesus was Jewish." When quizzed about the Ten Commandments, about half of those surveyed felt the sixth commandment, "Thou Shalt Not Kill," was the most relevant to today's world. Deemed the least relevant was the first commandment, which in the *New World Translation* reads: "I am Jehovah your God . . . You must not have any other gods against my face."—Exodus 20:2, 3.

Depleting Earth's Resources

"Two-thirds of the planet's resources, from energy sources to fresh water and clean air, have been heavily depleted or polluted," re-

ports the *Daily News* of New York. A study "prepared by 1,360 experts from 95 nations" pointed to the toll that humans have exacted on ecosystems during the past 50 years. "Human activity is putting such strain on the natural functions of Earth that the ability of the planet's ecosystems to sustain future generations can no longer be taken for granted," the report concluded. Backed by the UN and the World Bank, the report warned that over time, collapses in nature could occur, resulting in deforestation, disease, or oceanic "dead zones."

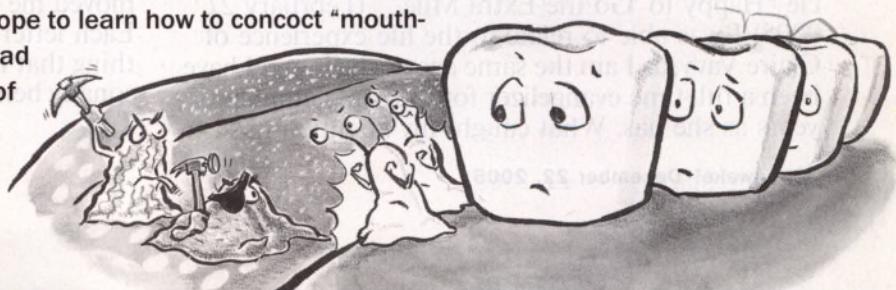
Kangaroo Care for Babies

"Babies who receive kangaroo care sleep longer, their breathing improves and they put on weight faster," says Japan's *Daily Yomiuri*. What

is "kangaroo care"? It simply means that mothers or fathers lie back and cradle their baby against their bare chest for an hour or two each day. Toyoko Watanabe, chief of the newborn infant division at the Tokyo Metropolitan Bokuto Hospital, said: "Kangaroo care began in Colombia as a desperate measure against a shortage of incubators. UNICEF took note of the fact that the death rate of premature babies dropped, and the period of hospitalization was shortened." Now, says the paper, "the idea is growing in popularity in developed countries for premature and full-term babies." The skin-to-skin contact has many benefits, including helping parents to bond with their infants. Moreover, it costs nothing and requires no special equipment.

Oral Microbes and Health

"The mouth is a complex eco-system," states *Science* magazine. "Over the past 40 years, oral biologists have been taking stock of the vast microbial communities thriving on and around teeth, gums, and the tongue." For some time biologists have known that bacteria normally found in the mouth can migrate and cause problems in other parts of the body. Heart problems have already been linked to an oral bacteria, and studies indicate that another contributes to premature births. Of course, the bad bacteria do most of their harm directly. If they gang up and prevail over the good bacteria in the mouth, the result is cavities, bleeding gums, and bad breath. "Three out of 10 people over 65 have lost all their teeth," the report says. "In the United States, half of all adults have either gum disease or tooth decay." By studying these bacteria, the researchers hope to learn how to concoct "mouth-washes that inhibit just bad mouth microbes instead of good and bad alike."

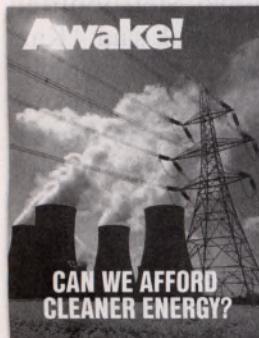


From Our Readers

Energy With gasoline prices soaring in my country, I have to express my appreciation for the cover series "Can We Afford Cleaner Energy?" (March 8, 2005) The thought that in God's new world, "Jehovah

God will ensure that everyone living will share the earth's abundant resources fairly" is reassuring.

M. N., United States



Solar System I have practically no knowledge of astronomy, but I read the article "The Man Who Unlocked the Secrets of the Solar System" with great interest. (March 8, 2005) The achievements of

Kepler, who discovered the laws of planetary motion, are wonderful. But when I consider the wisdom of Jehovah, who created these laws, I cannot help but be filled with awe.

M. Y., Japan

Astronomy is one of my many fields of interest. I was surprised to read that Johannes Kepler did not always have an easy life. Thanks to Jehovah, maybe in the new world I will have the pleasure of studying the unknown galaxies of our universe with that scholar of bygone times. Please keep writing articles as well worth reading as this one!

S. M., Germany

Thank you for breaking down a hard-to-grasp subject so that all can begin to fathom Jehovah's marvelous creations. Reading about Kepler's discoveries and his adamant decision to remain separate from false religion invigorated me! I am convinced that you will provide timely articles in the days to come.

S.M.C., Britain

Extra Mile I was very much encouraged by the article "Happy to 'Go the Extra Mile.'" (February 22, 2005) I was able to relate to the life experience of Claire Vavy, as I am the same age as she is and I have been a full-time evangelizer for the same number of years as she has. What caught my attention most

about the article was the fact that the experience was related by a young adult of single status. As a single woman, I was strengthened by Claire's zeal and by her positive attitude. The pictures of her throughout the article reveal her genuine happiness. That emphasized to me all the more that happiness is determined, not by our status or possessions, but by our love for Jehovah and our service to him.

Y. R., United States

Tomatoes I am 12 years old, and I liked the article "The Tomato—A Very Versatile 'Vegetable.'" (March 8, 2005) I am so thankful to Jehovah for creating a variety of delicious vegetables. I was surprised to read that there are even tomatoes with stripes! Thank you for such exciting articles.

M. F., Latvia

Crocodiles I was so impressed with the article "Can You Smile at a Crocodile?" (March 8, 2005) I have always considered the crocodile an amazing creature. I was pleased to read so many interesting facts that could move people to like crocodiles as much as I do. I look forward to Jehovah's new world, where we can get to know crocodiles even better!

L. I., United States

From Our Readers I was born with a bone disease. The beautiful, uplifting letters appearing in "From Our Readers" (March 8, 2005) regarding the article "A New Face for Mailyn" moved me to tears. (May 22, 2004) Each letter had that special something that I could relate to and personally benefit from.

M. J., Britain

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IT MOVED A YOUNG MAN TO EXAMINE HIS LIFE

■ Last year a young man wrote to a branch office of Jehovah's Witnesses. He explained that his grandmother had given him a copy of the book *The Greatest Man Who Ever Lived*. "I put it on a bookshelf," he said. But recently he became seriously ill, even thinking that he might die.

"Something drew me to take this book out," he noted. "I began reading the book with a certain amount of skepticism. But after finishing it, I came to the conclusion that the way I was leading my life was wrong. I began praying to God."

"After I recovered from my illness," he explained, "I decided to read the book a second time. To my surprise, I still found new things. I began to discern that though praying to God and reading Bible literature are

very good, these are not enough. The main thing is to devote our life to God and help other people believe in him. As I learned from the illustration of the minas, we must work for the increase of God's Kingdom."—Luke 19:13-27.

In conclusion, the man wrote: "I would like to express my thanks to Jehovah's Witnesses for this excellent book that has changed my life. I would like to receive more information and study the Bible. But my biggest desire is to serve God all my life, helping others to believe in him."

The book *The Greatest Man Who Ever Lived* includes the speeches Jesus delivered as well as his illustrations and miracles. To the extent possible, everything is related in the order in which it occurred. And the book features beautiful, authentic illustrations that endeavor to convey the feelings of Jesus and his contemporaries.

