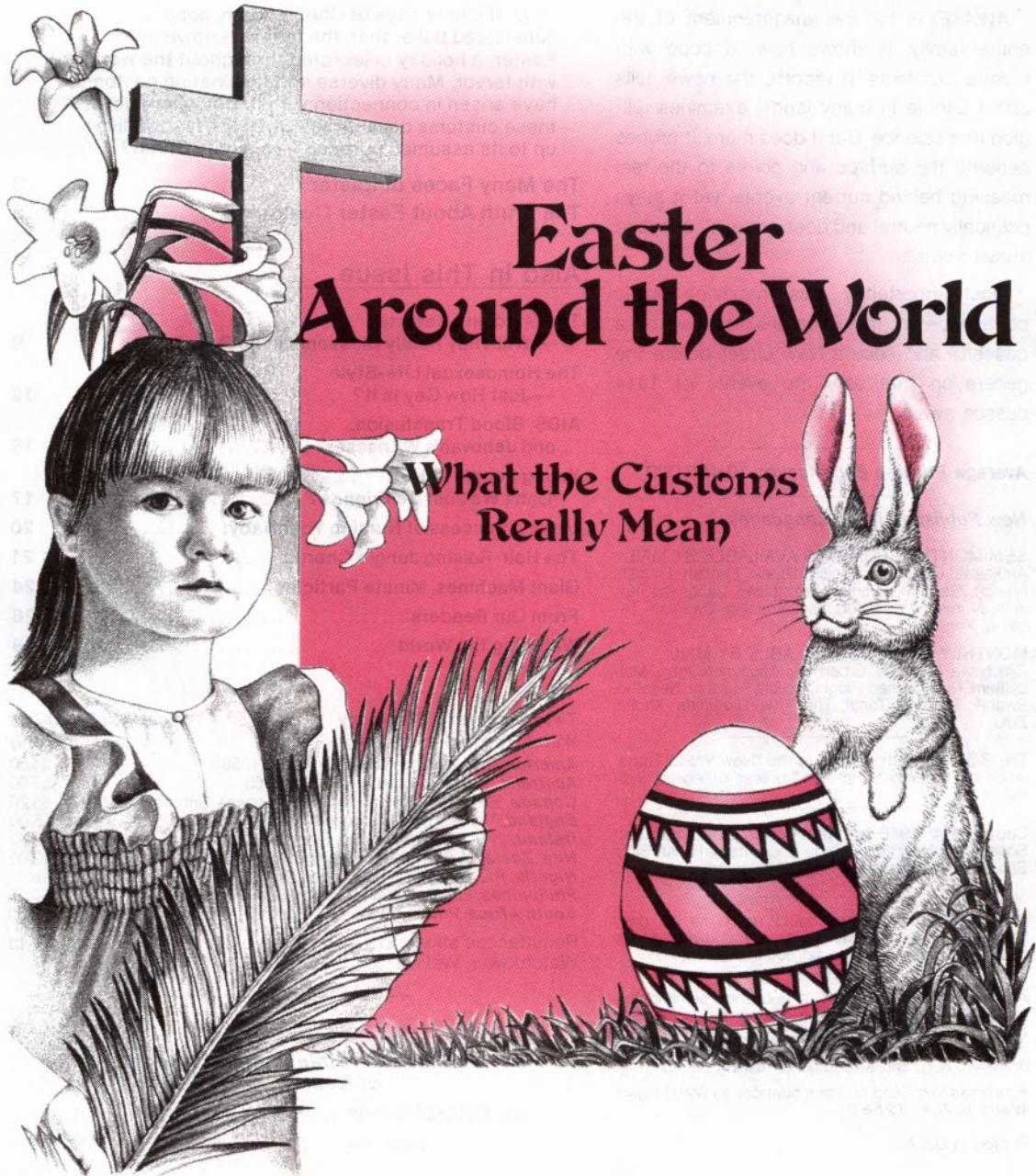


# **Awake!**

MARCH 22, 1986



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AWAKE! is 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 stays politically neutral and does not exalt one race above another.

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Awake! (ISSN 0005-237X) is published semimonthly for \$4.00 (U.S.) per year by Watchtower Bible and Tract Society of New York, Inc., 25 Columbia Heights, Brooklyn, N.Y. 11201. Second-class postage paid at Brooklyn, N.Y., and at additional mailing offices.

**Postmaster:** Send address changes to Watchtower, Wallkill, N.Y. 12589.

Printed in U.S.A.

## Feature Articles

Of all the holy days of Christendom, none is considered holier than the festival known as Easter, a holiday celebrated throughout the world with fervor. Many diverse and fascinating customs have arisen in connection with it. But where do these customs come from? Does the festival live up to its assumed purpose—to glorify Christ?

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### Twenty cents (U.S.) a copy

### Watch Tower Society offices

### Yearly subscription

### Semimonthly

America, U.S., Watchtower, Wallkill, N.Y. 12589	\$4.00
Australia, Box 280, Ingleburn, N.S.W. 2565	A\$7.00
Canada, Box 4100, Halton Hills (Georgetown), Ontario L7G 4Y4	\$5.20
England, The Ridgeway, London NW7 1RN	£5.00
Ireland, 29A Jamestown Road, Finglas, Dublin 11	£5.00
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Philippines, P.O. Box 2044, Manila 2800	₱50.00
South Africa, Private Bag 2, Elandsfontein, 1406	R5.60

Remittances should be sent to the office in your country or to Watchtower, Wallkill, N.Y. 12589, U.S.A.

Published by

**Watchtower Bible and Tract Society  
of New York, Inc.**

25 Columbia Heights, Brooklyn, N.Y. 11201, U.S.A.

Frederick W. Franz, President



# The Many Faces of EASTER

*The tiny Greek village is dark when the church lights suddenly go out. They remain that way until midnight when a bearded priest emerges, a lighted candle in hand. "Come forth," he urges, "and receive light from the unwaning light and glorify Christ, who is risen from the dead." Worshipers bundle around him to light their candles from the flame and then they carry them home. There is great joy in the village. Easter has begun.*

OF ALL the holy days of Christendom, none is considered more important than the spring festival called Easter. In other languages the festival is called *pâques* (French), *pasqua* (Italian), *påske* (Danish), *paasch* (Dutch), and *pasg* (Welsh). By whatever name you call it, this is a holiday dear to many. Australia's Anglican Archbishop John Grindrod calls Easter "the centre of a Christian's faith and the hinge-point of the whole civilisation that has grown around us."

In the ancient city of Jerusalem, a series of processions have begun. On Good Friday, thousands of worshipers retrace the last steps of Jesus. One woman crawls the half-mile trek on her knees. Later the pilgrims visit the Holy Sepulcher—the traditional burial place of Jesus. Black-clad women anoint the burial slab with oil and weep over and kiss it. But all is not peaceful in this city, the name of which means "possession of twofold peace." A thousand policemen are on hand to maintain order. Easter has different faces in different

parts of the world. For many, Easter is an intensely solemn occasion, a time for prayer, mass meetings, and pilgrimages to sacred sites.

For some Filipino men, Holy Week (called *Mahal na Araw*) is a time of self-inflicted pain. Though the church frowns on the practice, flagellation is still practiced by some who wish to make public atonement for their sins. Some of the womenfolk will make a pilgrimage to various shrines and wipe the images of Christ with a handkerchief. Later they will apply the handkerchief to themselves for healing.



In Guatemala, a Quiche Indian kneels in prayer over some ears of seed corn. Corn is the staple food of his people, and the traditional fertility rites coincide with the Easter Holy Week. He hopes Easter will bring him an abundant crop.

In Vatican City, nearly a quarter of a million people jam St. Peter's Square to watch the pope preside over an outdoor Mass. At the tolling of the noon hour, the pope appears on the basilica balcony to



The Star, Johannesburg, S.A.

give his annual Easter address—a condemnation of violations of human rights and the arms race.

On a quiet South African hill called Moria, a gathering is taking place that dwarfs the Vatican assemblage. Well over a million members of the Zionist Christian Church (an independent black church) have come. This has been called "possibly the biggest assembly of worshippers in Christendom."

In many lands, though, Easter means feasting, rejoicing, and merriment!



In the United States and in Germany, children excitedly go to bed, hoping to catch a glimpse of the Easter hare. In the morning they will hunt for the beautifully colored eggs the mysterious bunny has supposedly left. Popular in the United

## The celebration at Moria

States is the famous White House Egg Roll on Easter Monday. Thousands of children roll eggs down the beautiful lawn adorning the president's home. The rolling supposedly symbolizes the rolling of the stone away from the tomb of Christ. But the children seem oblivious to this. All they know is that egg rolling is a lot of fun.

In other lands, Easter puts on yet another face—a time for superstitious activities.



Easter Eve in Finland is a night for farmers to be on the lookout for trolls—witchlike creatures who inflict all sorts of mayhem on their flocks and property. Actually, though, the trolls are believed to be jealous old women who take mischievous delight in bringing misfortune to prosperous neighbors. Easter week is the perfect time for their vandalism. Superstitious Finns believe that evil spirits abound on Good Friday and Easter Eve.

Austrian couples are told that running water is especially blessed on Easter. So they save this water for their wedding day. Before heading to church, they

sprinkle each other with it. They hope it will bring good luck to their marriage.

At the tolling of the church bells Easter morning, Filipino parents will hold their small children by the head and lift them off the ground. They believe it will make their children grow tall.

Yes, Easter is many different things to people. Says a manager of a South African chocolate manufacturing company: "Easter presents an opportunity to make more profit." (During the 1985 Easter season, his firm produced over five *million* candy eggs!) Even Jewish, Muslim, and Hindu businessmen there jump on the Easter bandwagon. Explained one Indian businessman who lives in South Africa: "Muslims and Hindus do not believe in Jesus, yet

they still buy Easter eggs."

some of them promote Easter and will sell hot cross buns and Easter eggs." Indeed, one Hindu store owner admitted: "Muslims and Hindus also buy Easter eggs."

Recently, Easter has even taken on a political aspect, as an opportunity for political protest.

Brazilians have found a new Easter victim to thrash. Whereas in times past, an effigy of Judas Iscariot, the betrayer of Christ, was beaten, youths now club effigies labeled "Mr. Inflation."

Incredibly, though, all these diverse customs, traditions, and practices are believed to serve a common purpose—that of glorifying the resurrected Christ Jesus. But do they? And where do such customs come from in the first place?

## The Truth About EASTER CUSTOMS

*It is a ponderous stone that seals the tomb of Jesus. And the three women moving through the predawn darkness do not know how they will move it. But their desire to perform one last labor of love for their slain Master is compelling. Stone or no stone, they will tenderly grease the body so cruelly nailed to the stake three days earlier! It is a small but profoundly loving gesture.*

*Approaching the garden tomb, the problem of moving the stone looms larger than ever in their minds. But upon arriving they are astonished to see that the stone has been rolled away and the tomb emptied! A white-clad angel explains: "Stop being stunned. You are looking for Jesus the Nazarene, who was impaled. He was raised up, he is not here."*

—Mark 16:1-6; John 20:1, 2.

THE resurrection of Jesus Christ is one of the bedrock beliefs of Christianity. Said the apostle Paul: "But if Christ has not been raised up, our preaching is certainly in vain, and our faith is in vain." (1 Corinthians 15:14) Would it therefore not seem logical for Christians to commemorate this great event?

### 'Do This in Remembrance of Me'

Proclaimed the Vatican: "Every week, on the day which she has called the Lord's day [Sunday], [the church] keeps the memory of His resurrection." Additionally, "in the supreme solemnity of Easter she also makes an annual commemoration of the resurrection."—*The Documents of Vatican II*.

## *Easter sunrise services originated with sun worshipers*

Nowhere, however, does the Bible indicate that early Christians observed either a weekly Sunday or a yearly Easter to commemorate Christ's resurrection. The night before he died, Christ ordered quite a different celebration. He served his disciples a simple meal of wine and bread and commanded them, "Keep doing *this* in remembrance of me."—Luke 22:19.

It was thus Christ's death, not his resurrection, that Jesus wanted memorialized. And how often? Jesus served this meal on the night of the Jewish Passover meal—a yearly celebration of Israel's deliverance from Egypt. (Matthew 26:19, 20, 26-28) Obviously, Jesus intended to replace the Passover with a yearly serving of this memorial meal. Neither Easter nor any other celebration was commanded by Christ. Fifth-century church historian Socrates said: "The apostles had no thought of appointing festival days, but of promoting a life of blamelessness and piety."

### ***Easter Emerges***

Both Jesus Christ and the apostle Paul predicted that Christianity would be infiltrated by false teachings. (Matthew 13:24, 25, 36-40; 2 Timothy 4:3) After the death of Jesus' apostles, the idea took root that it would be appropriate to hold a fast (now known as Lent), followed by a feast, at Passover season. Somehow this became thought of as a way to commemorate Christ's resurrection.

### ***Easter and Its Customs***

Easter's ascendancy as a festival thus was not Bible based. In fact, scholars claim that the very word Easter is of Anglo-Saxon origin, referring to the springtime.

During that season, the ancients thought the sun was reborn after months of winter death.\* Other terms for the festival, such as *pâques* or *pasqua*, are derived from the ancient Hebrew word *pe'sach*, or "pass-over." Christendom argues that Easter replaces this Jewish festival. But this ignores the fact that Jesus replaced the Passover, not with Easter, but with his memorial supper.

Historian Socrates therefore concluded: "It seems to me that the feast of Easter has been introduced into the church from some old usage, just as many other customs have been established." The plethora of Easter traditions indeed comes from "some old usage"—the usage of idolatrous nations! Catholic priest Francis X. Weiser admitted: "Some of the popular traditions of Lent and Easter date back to ancient nature rites." These rites of spring were originally designed to "frighten the demons of winter away."

But did not the church stamp out such paganism in her converts? *Curiosities of Popular Customs* explains: "It was the invariable policy of the early Church to give a Christian significance to such of the extant pagan ceremonies as could not be rooted out. In the case of Easter the conversion was peculiarly easy. Joy at the rising of the natural sun, and the awakening of nature from the death of winter, became joy at the rising of the Sun of righteousness, at the resurrection of Christ from the grave."

\* Eighth-century Catholic scholar Venerable Bede claimed that the word was derived from the name of an Anglo-Saxon goddess of spring, "Eostre." In his book *The Two Babylons*, Alexander Hislop claimed a connection between Easter and the Babylonian goddess Astarte.

## "Charming"?

In *The Easter Book*, Weiser justifies all of this by saying that the church has 'elevated the pre-Christian symbolism of nature into a Christian sacramental.' Non-Christian practices, he says, "have added a charming touch to the supernatural meanings of the [Easter] season."

Admittedly, the sight of children scrambling for brightly colored eggs may seem "charming." The same could be said for

many Easter customs. But are they simply harmless fun? Said one Greek café owner: "I know that the egg—it is stupid; and the bunny—more stupid; and that we fast for 40 days before Easter—it's stupid. But this adds a bit of spice to our life."

Perhaps. But sincere Christians are concerned that the Bible says: "For what fellowship do righteousness and lawlessness have? Or what sharing does light have with darkness? . . . 'Therefore get out

## Pagan Practices That Were "Christianized"

**Easter Eggs:** Since the eating of eggs was formerly forbidden during Lent, "decorated eggs," claims *The Encyclopedia Americana*, "could symbolize the end of the penitential season and the beginning of joyful celebration." However, reference works agree that the egg was a symbol of life and fertility among idolaters. Says the book *Celebrations*: "Eggs were said to be dyed and eaten at the spring festivals in ancient Egypt, Persia, Greece, and Rome. The Persians of that time gave eggs as gifts at the vernal equinox."

**Easter Hares and Rabbits:** In Europe, the hare has long been a traditional symbol of Easter. (In North America, the animal is a rabbit—a close relative of the hare.) Yet *The New Encyclopædia Britannica* explains that the hare was "the symbol of fertility in ancient Egypt." Thus when children hunt for Easter eggs, supposedly brought by the Easter rabbit, "this is not mere child's play, but the vestige of a fertility rite."—*Funk & Wagnalls Standard Dictionary of Folklore, Mythology and Legend*, volume 1, page 335.

**Sunrise Services:** Says *The Book of Festivals and Holidays the World Over*: "It was a common belief among the early Christians that on Easter morning the sun danced in honor of the Resurrection and people rose long before the sun to see the feat. Perhaps this ancient belief is the inspiration for the many sunrise services that take place on Easter morning

in all parts of the United States and Europe."

But says Walsh's *Curiosities of Popular Customs*: "This idea of the sun dancing on Easter Day may easily be traced back to heathen customs, when the spectators themselves danced at a festival in honor of the sun, after the vernal equinox."

The book *Celebrations* adds: "Sunrise services are not unrelated to the Easter fires held on the tops of hills in continuation of the New Year fires, a worldwide observance in antiquity. Rites were performed at the vernal equinox welcoming the sun and its great power to bring new life to all growing things."

**Water Rites:** The belief that running water on Easter morning is especially blessed is common. However, Hastings' *Encyclopædia of Religion and Ethics* reminds us: "Since water is one of the essential factors in the preservation of life and the growth of the crops, it naturally plays a conspicuous part in rain-making ceremonies and other seasonal rites among primitive people."

**The Blessing of the New Fire:** A Catholic rite, in preparation for the Easter vigil, in which a fire is started from a flint rock. Says Hastings' *Encyclopædia of Religion and Ethics*: "The new fire probably took rise from a pagan custom to which, when adopted by Christians, a gospel symbolism was attached."

from among them, and separate yourselves," says Jehovah, "and quit touching the unclean thing."'" (2 Corinthians 6:14-17) Surely that would include customs that are clearly derived from—or unmistakably resemble—false religious practices. True, clerics argue that such practices become acceptable when brought into the church. However, it was this same line of reasoning that once nearly led the Israelites to ruin!

In violation of God's command, they made a golden calf. (Exodus 20:4) It was no doubt modeled after idols they had seen in Egypt. Then they used the idol in a rite they called "a festival to Jehovah." But did Jehovah God feel that this added "charm" to his worship? On the contrary! Only Moses' intervention spared the Israelites from extermination!—Exodus 32:1-5, 9-14.

Easter customs—eggs, bunnies, and bonfires—are therefore not cleansed by being practiced by Christians. Rather, they *defile* anyone practicing them.—Compare Haggai 2:12, 13.

Interestingly, though, an article in the Australian magazine *The Bulletin* observed: "Jehovah's Witnesses write Easter off as an amalgam of Christian and pagan rites." Yes, they decline participation in idolatrous rites. Yet they *do* give honor to the resurrected Christ. The article continued: "Witnesses gather . . . [once a year] to commemorate Jesus' death." This is done in the way Christ commanded—by the serving of unleavened bread and wine.

The challenge now to those who know the truth about Easter is whether they will *act* upon what they know or not.

## Easter Oddities

**Ham Dinners:** Ham on Easter is a long-standing custom among many Catholics. However, the custom is a relic of English bigotry. *The American Book of Days* says that the English had a habit "of eating a gammon of bacon on that day to show their contempt for the Jewish custom of not eating pork." William the Conqueror, according to the book *Celebrations*, changed the bacon to ham to suit his liking.

**Easter in America:** Because the religious scene in America was for a long time dominated by puritanical thinking (the Puritans disdained ritual), Easter was at first a rather small-scale event. It appears that the holiday became popular, though, during the U.S. Civil War. So many families lost loved ones during this conflict that the holiday was promoted as a means of bringing consolation to the bereaved.

**Easter Bonfires:** Easter bonfires were originally banned by the church as being a pagan symbolism, says Weiser. (*Synod of Mainz*, 742 C.E.) However, "Saint" Patrick introduced the practice in Ireland "to supplant the Druidic pagan spring fires with a Christian and religious fire symbol of Christ . . . This tolerated custom became so popular eventually that the popes incorporated it into the liturgy of the Western Church in the latter part of the ninth century."

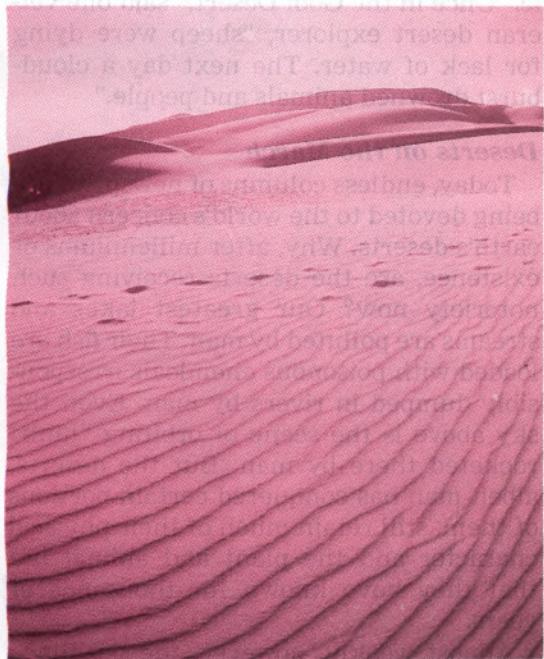
—*The Easter Book*, by Francis Weiser, S.J.

**Easter in Japan:** A Catholic woman asked a Japanese nun why they didn't use bunnies in their Easter celebration (called *Fukkatsu-sai*, or festival of resurrection). Her reply: "What are they? Do they have any special meaning on Easter?"

Says one former Catholic: 'Easter in Japan was an occasion a bit more serious than in Western countries. After Mass, we received colored eggs, but we were not told their meaning. Also, in church the crosses and other images would be covered with purple cloth during Lent. But on the day of Easter, the coverings would be removed to symbolize the joy of the resurrection.'

# The Marching Deserts

## Will They Really Blossom as the Rose?



**S**AND! Sand! Sand! As far as the eye can see, nothing but burning, drifting sand. In the distance giant pyramidal dunes, 700 feet (210 m) high and six times as wide at the base, reach upward to meet the cloudless sky. Constant winds carve serpentine ripples in the sand. The sun is intense. Even snakes and frogs must take refuge from it under the surface of the sand. The reflection from the sand is blinding. The shimmering heat plays tricks on the eyes—mirages of pools of water where there are none; objects in the distance that appear as one thing but in reality are something different.

Then the winds blow in gale force, churning up the sand in such great clouds

that they can turn daylight into darkness. They can penetrate clothing and sting the skin like needle points. They can strip the paint from automobiles and reduce windshields to frosted glass. They can carve desert stones into fantastic shapes and bury telephone poles up to half their height.

At midday the temperature may be a scorching 125 to 130 degrees Fahrenheit (52° to 54° C.), at which time visitors sizzle. At night the mercury may plummet to a bone-chilling 40 degrees (4° C.) or less, at which time they may freeze. If dressed in layers of wool clothing, they will stay cooler; scantily clad they will scorch. If seated one foot above the ground, they may be 30 degrees (17° C.) cooler than if they sit on the ground itself. Add to this the parched throats, the quest for water, the fear of snakes, the sting of scorpions, the perils of flash floods, the dangers of getting lost—it all makes this silent, arid world of desert sand foreboding.

No one seems to know for sure how many deserts, large or small, there are in the world, for an obvious reason—no one seems to have counted them. "I have found more than 125," said one noted desert explorer. "Perhaps there are twice that many." There are, however, deserts on every continent of the earth. They occupy nearly a fifth of the earth's land surface.

The largest desert of all, the Sahara in

# *"Every few years we get a mist—but the drops are very small"*

North Africa, contains half the desert surface of the world—three and a half million square miles of it.\* The Arabian Desert on the Arabian Peninsula and the Kalahari Desert in southwest Africa embrace a land area of 500,000 and 200,000 square miles respectively. The Australian Desert, second in size to the Sahara, boasts an area of 1.3 million square miles—nearly half of the continent. The Gobi Desert in China, about twice the size of the state of Texas in the United States, covers 500,000 square miles.

North America has its deserts—25 percent of the state of California is desert. Deserts in Arizona, Oregon, Utah, Nevada, and Mexico are just as dry and just as hot. California's Death Valley is reported to be the second hottest desert in the world. South America is noted for having the driest desert on earth—the Atacama—extending 600 miles (970 km) south from the border of Peru into the northern part of Chile. All deserts, all sharing the same peculiarity—hot and arid.

For example, there are places in the Atacama Desert in Chile where rain is so scarce it prompted one resident of the area to lament, "Every few years we get a mist—but the drops are very small." In other places in the same desert, official reports show no rain or snow during a 14-year period. In other places in the Atacama, unofficial reports show no rain for 50 years, and in even drier areas, rain has never been recorded. In the Namib Desert in South-West Africa, the annual rainfall varies from less than an eighth of an inch to six inches (0.3 cm to 15 cm). In areas in

the Sahara, in one two-year period the rainfall was zero. The rainfall can be erratic. "Once in the Gobi Desert," said one veteran desert explorer, "sheep were dying for lack of water. The next day a cloud-burst drowned animals and people."

## **Deserts on the March**

Today, endless columns of newsprint are being devoted to the world's concern about earth's deserts. Why, after millenniums of existence, are the deserts receiving such notoriety now? Our greatest lakes and streams are polluted by man. Their fish are loaded with poisonous chemicals irresponsibly dumped in rivers by man. Even the sky above is the scene of orbiting "junk" rocketed there by man. But the deserts, albeit man has conquered certain portions of them, still retain much of their physical character and the plant and animal life that they have known for thousands of years.

Almost weekly, however, the headlines are telling the story—"Spread of Deserts Seen as a Catastrophe Underlying Famine," reports *The New York Times*. "Disastrous drought across Africa turns Sahel into another Sahara," headlines *The Atlanta Journal and Constitution*. "Deserts continue to spread," *The Boston Globe*. "World's arable land deteriorating," *The Toronto Star*. "In One Year, Sahara Engulfs Much of Chad," heralds another. Reams are being written on the threat of spreading deserts.

Now read below the headlines. "The Sahara has been extending its desert barrenness southward at the rate of 6 to 12 miles [10 to 20 km] a year for more than a decade, gradually incorporating the Sahel, the semiarid belt at its southern fringe,"

\* One sq mi = 2.6 sq km.

says *The New York Times* of January 2, 1985.

"About 52 million acres [21 million ha] of land become desert every year . . . The problem occurs primarily in Africa, India and South America," reports *The Boston Globe* of June 11, 1984.

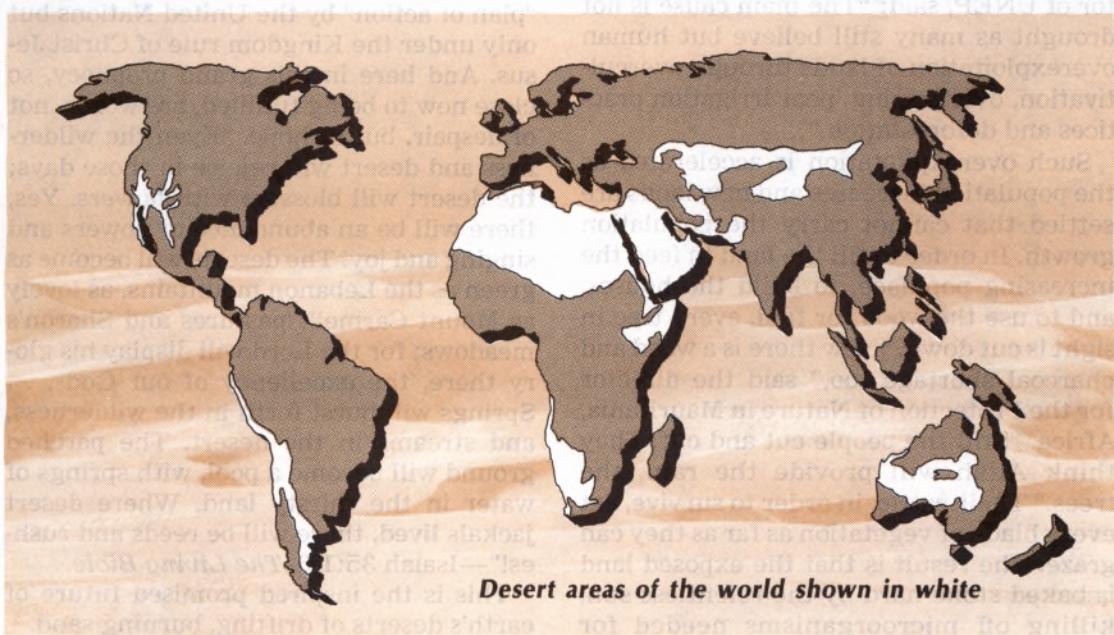
"The expansion of the desert is threatening the very existence of some countries, including Mauritania, where government officials say the Sahara Desert is moving south at a rate of four miles [6 km] a year. Mauritanians talk about the days when lions lived in the wooded areas of the country, the same areas that today are no more than a barren landscape of dead trees and blowing sand," relates *The Atlanta Journal and Constitution* of January 20, 1985.

This global phenomenon of expanding deserts is not new. However, a new word has been coined to describe this insidious process—"desertification." It is rapidly becoming a household word in some parts of the world. Desertification currently affects

about a hundred countries, particularly in the underdeveloped nations in Africa that are literally surrounded by deserts.

It is a problem to which the United Nations organization is seeking a solution. "We have to look at this as a colossal problem," said Gaafar Karrar, chief of the desertification branch of UNEP (United Nations Environmental Program). "We could lose one-third of the world's existing arable area by the end of the century," he said. According to a UN report, desertification threatens 35 percent of the earth's land surface, or about 45 million square miles, and 20 percent of its population—about 850 million people. "There isn't actually anywhere in the world that is immune from desertification," Karrar said.

In 1977, 94 nations met in Nairobi, Kenya, and agreed on a "plan of action" to arrest the spread of deserts by the turn of the century. But because of general indifference on the part of the nations and lack of financing, the plan was abandoned as no longer being feasible.



**Desert areas of the world shown in white**

sible. In 1980 UNEP estimated that it would cost about 90 billion dollars (U.S.) over 20 years, or about 4.5 billion dollars per year, to stop the spread of deserts by the year 2000. How serious do the experts consider this marching world of sand to be? "If the present march of desertification continues," said a representative of UNEP, "by the year 2000 the situation will have become a global catastrophe."

When one considers the very nature of desertification, some interesting questions are posed: What plan of action could be instituted by the UN that could effectively stem this seemingly inexorable expansion of the deserts? Can the UN harness the thinking of man and bring it totally in line with that of farsighted, well-intentioned men who see the global catastrophe that continued desertification will bring? The word "desertification," says one writer, is a "term that translates into the expansion of deserts as a result of human activity." Underscoring the root cause of desertification, Dr. Mostafa K. Tolba, executive director of UNEP, said: "The main cause is not drought as many still believe but human overexploitation of lands through overcultivation, overgrazing, poor irrigation practices and deforestation."

Such overexploitation is accelerated as the population increases and new lands are settled that cannot carry the population growth. In order to till the land to feed the increasing populace, to build the houses, and to use the wood for fuel, every tree in sight is cut down. "Now there is a wood and charcoal shortage too," said the director for the Protection of Nature in Mauritania, Africa. "Still the people cut and cut. They think Allah will provide the rain, the trees." Their cattle, in order to survive, eat every blade of vegetation as far as they can graze. The result is that the exposed land is baked stone hard by the relentless sun, killing off microorganisms needed for

plant growth. As the vegetation decreases, desert increases.

Next comes the blowing wind. The sand from the surrounding arid lands is swept by the winds and blown across the exposed earth, and with nothing to check its drift, it engulfs the land, piling up in the streets and blowing into homes, forcing the people out and into new territories in a seemingly never-ending cycle.

Where there was once ample rainfall, the newly exposed land reflects the sun's heat, altering the thermal dynamics of the atmosphere in ways, experts say, that suppress rainfall, accelerating the growth of desert-like conditions, gaining in momentum as it goes. People dig into the dry earth to plant their seed, but, alas, nothing will grow. Famine stalks the land. When will it end?

### ***Will the Deserts Really Blossom as the Rose?***

Over two millenniums ago, the prophet Isaiah was inspired to write regarding the future of the deserts of this earth and their miraculous transformation—not by some "plan of action" by the United Nations but only under the Kingdom rule of Christ Jesus. And here in this grand prophecy, so close now to being fulfilled, are words, not of despair, but of hope. "Even the wilderness and desert will rejoice in those days; the desert will blossom with flowers. Yes, there will be an abundance of flowers and singing and joy! The deserts will become as green as the Lebanon mountains, as lovely as Mount Carmel's pastures and Sharon's meadows; for the Lord will display his glory there, the excellency of our God . . . Springs will burst forth in the wilderness, and streams in the desert. The parched ground will become a pool, with springs of water in the thirsty land. Where desert jackals lived, there will be reeds and rushes!"—Isaiah 35:1-6, *The Living Bible*.

This is the inspired promised future of earth's deserts of drifting, burning sand.

# *The Homosexual Life-Style*

## *Just How Gay Is It?*

*Out of the closet and into the headlines. That is the current trend for homosexuality. Books, plays, movies, television programs, and news reports publicize it, usually as an acceptable alternative life-style. But just how acceptable is it? What does it involve? Does it live up to its designation as "gay"? And what about those who resist it? Are they narrow-minded? And God, does he find it acceptable? What does his Word, the Bible, say about it? These are important questions, in view of the propaganda for its acceptance.*

**I**N THE United States, books and plays about homosexual life are reviewed in the press. A book on lesbian nuns reaches six-figure sales and is reviewed on a popular daytime TV show. New York City's board of education endorses a high school for homosexuals. The congregation of Riverside Church (nondenominational, 3,000 members) in the borough of Manhattan, New York City, votes "in favor of a policy statement accepting homosexual relationships as part of the concept of Christian family life."

"Britain is to have its first Gay Olympics," the London *Daily Mail* reported. A three-part British documentary "suggests Jesus could have been a homosexual." In Toronto, Canada, a "homosexual festival kicks off with 2,000 parading downtown," and it "included an interdenominational

church service." Gay parades, gay churches, gay bookstores, gay bars, gay bathhouses, gay political activists with their gay bills of rights—on and on this self-styled gaiety proliferates within society.

### *Growing Propaganda for the Gay Life-Style*

Those who resist it are the ones who are lectured. In New York City, an avowed homosexual was appointed to the bench of the criminal court. At the time he was sworn in, he "praised himself for his 'courage' to be what he is," then "kissed his male lover and received a standing ovation." There was some opposition, but the city's largest newspaper, the *Daily News*, editorialized that anyone who opposed the appointment of the homosexual judge "is a bigot."

During November 1985 in their nightly newscasts, two network-owned-and-operated TV stations in New York City, WNBC and WABC, ran special segments on homosexuality—to hop on the homosexual bandwagon, as one reporter indicated. The WNBC series, entitled "If Your Kid Is Gay," was especially aimed at parental responses to homosexual children. Psychiatrists on the program indicated that in such children this sexual orientation was natural and deep-seated and that parents should not try to change it. 'Better to have your child happy and homosexual,' one said, 'than unhappy and heterosexual.'

# *Homosexuality has come storming out of the closet. Those who resist it are the ones lectured*

The March 1985 issue of *Seventeen* suggested that if you are troubled by anyone's being homosexual, you may need to seek counsel "at a local gay community services center." Its article concluded with a statement by "Reverend" Robert H. Iles: "Whether you love men or love women is, in the final analysis, not as important as the fact that you are able to love." He equates love with sex and says, Make love, whether homo or hetero.

One British educator lamented that in schools "all sex education programmes are made for heterosexuals . . . not one of them had made a single programme for gay pupils." He also complained that "most school libraries will only stock romances . . . with heterosexual heroes and heroines—despite the increasing volume of gay fiction." He pinpointed the cause of prejudice against homosexuals: "The idea that heterosexuality is superior . . . is precisely the attitude at the root of the prejudice."

## **Homosexual "Love"**

But isn't heterosexuality superior? Do not the design and natural functions of the bodily parts involved make this obvious? Isn't male with female the obvious norm, and male with male the obvious perversion? Homosexual "love" involves practices the apostle Paul must have had in mind when he spoke of things "not even [to] be mentioned among you" and "shameful even to relate." (Ephesians 5:3, 12) Nevertheless, at times he did feel it necessary to allude to those shameful practices at Romans 1:24-27. The present also seems to be such a time. Homosexuality has come storming out of the closet. With a chip on

its shoulder, it parades about as an acceptable life-style. But is it? Just what does it involve?

The medical magazine *Practical Gastroenterology*, in its issue of July/August 1985, detailed for doctors treating homosexuals some of the practices of the gay life-style. It indicates that mutual masturbation is commonly practiced, as are also oral and anal sex. Other unbelievably shocking practices are explicitly detailed in the article.

It shows that homosexuality can descend into sadomasochism, the joy of degrading and being degraded. For true Christians this life-style is totally unacceptable. The insidious propaganda now flooding out on its behalf must be shunned like the plague it is.

## **The Gay Harvest**

Such flagrant abuses are not practiced with impunity. As people sow, they reap. *Practical Gastroenterology* ran a series of articles on diseases caused by homosexuality. Hepatitis simplex, liver infections, gonorrhea, syphilis, parasitic infections, small-bowel lymphoma, Kaposi's sarcoma, and, of course, the dreadful AIDS—these are just a few of the diseases considered in its issues of July/August and September/October 1985.

New research convicts AIDS of damaging the brain and the spinal cord. The science section of *The New York Times*, October 15, 1985, reports: "Some of these patients show clear signs of dementia, including memory loss, inability to plan or make decisions, and a remarkable indifference to everything. Others develop partial

**"God gave them up to disgraceful sexual appetites . . . males with males, working what is obscene."—Romans 1:26, 27**

paralysis, loss of muscle coordination or even worse problems in control of their bodies . . . Some of the brains of AIDS victims are shrunken. Their interior spaces, called the ventricles, are dilated and parts of the all-important cerebral cortex appear shriveled . . . Even if treatments can be devised to halt a virus infection and allow the immune defense system to rebuild itself, brain damage is likely to be permanent."

AIDS, currently incurable, cases more than doubling yearly, always fatal, and spreading worldwide. Principally afflicts homosexuals, but also intravenous drug users and recipients of blood transfusions or blood products. Also babies born to virus-infected mothers. Spread by bodily fluids, the virus is found in blood, sperm, urine, saliva, and tears. It has a long incubation period. Many years may separate exposure to the virus and the outbreak of AIDS, making early diagnosis impossible. The virus lies within, a time bomb waiting to explode—but who knows when?

It is now exploding worldwide. More than a million people—some say nearly two million—in the United States are estimated to have been exposed to the AIDS virus. More than 14,500 cases since 1981, over 7,000 of whom have died. The number of cases is escalating throughout the world—Europe, Asia, Australia, Caribbean countries, nearly 20 African nations, and 15 countries in the Americas. Last year the number of nations reporting cases of AIDS to the World Health Organization in Geneva jumped from 40 in August to 71 in October, with the case count at that time nearing 17,000.

### **A Life-Style Unacceptable to Jehovah**

Homosexuality is not an alternative lifestyle acceptable to Jehovah God. Frequently, both gay and liberal preachers twist the scriptures in futile endeavors to make it seem that it is. (2 Peter 3:16) Thousands of years ago Jehovah destroyed Sodom because most of the males of that city practiced it. (Genesis 19:4-25) Centuries later the apostle Peter likened men who copied those Sodomites to "unreasoning animals born naturally to be caught and destroyed."—2 Peter 2:6-13.

In unmistakable language, both male homosexuality and lesbianism are condemned by the inspired apostle Paul: "God gave them up to disgraceful sexual appetites, for both their females changed the natural use of themselves into one contrary to nature; and likewise even the males left the natural use of the female and became violently inflamed in their lust toward one another, males with males, working what is obscene and receiving in themselves the full recompense, which was due for their error."—Romans 1:26, 27.

Paul also wrote: "Do not be misled. Neither fornicators, nor idolaters, nor adulterers, nor men kept for unnatural purposes, nor men who lie with men, nor thieves, nor greedy persons, nor drunkards, nor revilers, nor extortioners will inherit God's kingdom." (1 Corinthians 6:9, 10) Other Bible translations render the expression "men who lie with men" in various ways, as follows: sodomites, perverts, sexual perverts, homosexual perverts, homosexual perversion, and just plain homosexuals.

### **A Happy Life-Style Without End**

There is nothing gay about the gay harvest. It can be avoided by listening to Jehovah: "I, Jehovah, am your God, the One teaching you to benefit yourself, the One causing you to tread in the way in which you should walk. O if only you would actually pay attention to my commandments! Then your peace would become just like a river, and your righteousness like the waves of the sea."—Isaiah 48:17, 18.

Some psychiatrists and others, however, say that homosexuality cannot be "cured," even by religious conversion. Very difficult, perhaps, but not impossible. The apostle Paul showed this when he next said: "And yet that is what some of you were. But you have been washed clean." (1 Corinthians 6:11) So it was done by early Christians. And it has been done today. It will yet be done by others who turn to Jehovah for help: "For all things I have the strength by virtue of him who imparts power to me." (Philippians 4:13) Therefore, "strip off the old personality with its practices, and clothe yourselves with the

new personality, which through accurate knowledge is being made new according to the image of the One who created it."—Colossians 3:9, 10.

Jehovah hates what is bad, but he is ready to show mercy to individuals repenting of their wrongdoing. Jehovah's Witnesses also hate the bad, including their own fleshly imperfections, but they do not hate themselves or other individuals who do the badness. Hate the sin but not the sinner is Jehovah's precept and also that of his worshipers. The Bible writer Jude says: "Continue showing mercy to others, doing so with fear, while you hate even the inner garment that has been stained by the flesh."—Jude 23; see also Psalm 97:10, Matthew 5:43-48, and Romans 7:15-25.

As the apostle Paul wrote at Romans 3:23: "All have sinned and fall short of the glory of God." But all sinners, including homosexuals, who take in accurate Bible knowledge and act upon it will reap benefits now and gain eternal life in a paradise earth.—Psalm 37:10, 11, 29; Matthew 6:10; John 17:3; Revelation 21:3-5.

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## **AIDS, Blood Transfusion, and Jehovah's Witnesses**

"Within the past year or so, the risk of AIDS in blood and blood products has raised fears of 'bloodbank roulette' to a new high. New blood tests (with their inevitable percentage of false negatives) to determine AIDS carriers provide no guarantee that the agent which transmits AIDS will not seep into our nation's blood pool. On the other hand, because of their concomitant inevitable rate of false positives, these tests expose blood donors to the risk of being mistakenly identified as AIDS carriers. This kind of labeling may have profound sociologic, occupational

and educational implications for the unfortunate blood donor. In this computer age, efforts to insure confidentiality are woefully inadequate . . . They [doctors working with AIDS] know the link between the nation's blood supply and AIDS . . . Are they unwilling to admit that scientific evidence is now supporting the religious opposition of Jehovah's witnesses (the objects of deep hatred by the practitioners of modern medicine) to blood transfusions?"—*The People's Doctor*, A medical newsletter for consumers, volume 9, No. 5, by Dr. Robert S. Mendelsohn.

## Young People Ask...

# 'Can't We Just Be Friends?'

"**T**HERE'S nothing going on between us," claims Marie.\* "We just chat. What's the world coming to if you've got to be leery of everyone? You might as well live like a shut-in!" Marie's rather strong assertions came after someone warned her of the dangers of spending time in a car alone with a boy her age. Obviously, she did not appreciate the warning. She thinks: 'What possible harm is there in just being friends?'

Michel holds a somewhat more sober view, especially since his experience with his pretty next-door neighbor Louise. The young man explains: "We had a very close relationship but with no thoughts of marriage. However, I rapidly found myself in a terrible turmoil—I just could not get Louise off my mind. My feelings were getting out of control! So one evening I told my problems to a friend who offered to put me up that very evening." Removed from the 'danger zone,' Michel was able to think a bit more clearly about where his friendship was heading.

It is just as Dr. Marion Hilliard stated years ago in *The Ladies' Home Journal*: "An easy companionship traveling at about ten miles an hour can shift without warning to a blinding passion going a hundred miles an hour."

### ***Emotional Consequences***

The Bible urges young men to treat

\* Some of the names have been changed.

"younger women as sisters with all chasteness." (1 Timothy 5:2) Many have successfully applied this principle and as a result enjoy clean, wholesome friendships with members of the opposite sex. They are careful to keep their relationships within reasonable bounds. But what happens when such a friendship goes out of control? A previous article warned of moral consequences that can result.\* Fortunately, most Christian youths would not allow matters to go that far. There can, however, also be emotional consequences.

Sixteen-year-old Mike learned this when he developed a relationship with a 14-year-old girl: "At first, we just wanted to be friends. But as I quickly found out, two people *cannot* stay just friends when they keep seeing each other exclusively. Our relationship kept growing and growing. We soon had special feelings for each other, and we still do." Since neither is in a position to pursue marriage, those feelings are a source of much frustration. No wonder that Mike asks: "Should I try to break it off?"

'But I just don't feel that way about my friend,' someone might object. 'I'm not attracted to him [or her] and would never get romantically involved with him.' Perhaps. However, the proverb warns: "He that is trusting in his own heart is stupid."

\* Please see the article "What's Wrong With Being 'Just Friends'?" appearing in the June 22, 1985, issue of *Awake!*



**Two people cannot stay just friends when they keep seeing each other exclusively**

(Proverbs 28:26) Our hearts can be treacherous, deceptive, blinding us to our true motives.

Through his prophet Jeremiah, God warns us of this: "The heart is more treacherous than anything else and is desperate. Who can know it? I, Jehovah, am searching the heart, examining the kidneys, even to give to each one according to his ways, according to the fruitage of his dealings."—Jeremiah 17:9, 10.

One young Christian girl, for example, became quite friendly with a young boy at school. She reasoned that this was fine because she would share thoughts from

the Bible with him. But it soon became apparent that the boy was interested in more than talking about the Bible. "Through no fault of my own," she claims, "he has become more and more close to me." As far as she is concerned, though, the feeling isn't mutual.

Interestingly, though, the girl admits: "My mother insists on believing I've fallen for him." Mothers are a discerning lot. And doubtless this mother sees that her daughter is pulling the wool over her own eyes. After all, is it reasonable to think that the girl would be so adamant about maintaining the relationship if she wasn't emotionally involved? And even granting a sincere interest in helping her young friend, can she say that his strong feelings for her are 'no fault of her own'? The book *The Family, Society, and the Individual* observes "that it is the male who is attracted more readily." Even innocently turning on the charm can easily arouse a male—emotionally and sexually.

The same thing happens when a young man pays particular attention to a young woman. Women may respond to attention from the opposite sex a bit more slowly than do men, but when they finally do respond, the feelings aroused are often very deep. Therefore, whoever allows a friendship with the opposite sex to get too close is fooling himself. For even where one person's feelings are not stirred, the other person's feelings may be.

Saying, 'Let's be friends' can and often does prolong the agony of unrequited affection. As the publication *Your Youth—Getting the Best out of It* explains: "Generally, it is the man who initiates courtship, by expressing interest in the

woman. If he is honest and serious about it, she has the right to believe that he is at least contemplating marriage."\* Continued association can thus easily be misunderstood to mean courtship, with marriage in view.

True, informing a lovesick friend that his or her feelings are unshared can cause a devastating emotional blow. But continuing the relationship delays the day of reckoning. Says the Bible: "Just like someone mad that is shooting fiery missiles, arrows and death, so is the man that has tricked his fellowman and has said: 'Was I not having fun?'" (Proverbs 26: 18, 19) The original Hebrew word translated "trick" can also mean to "deceive, mislead." If a friendship is a mere expedient for having a good time without commitment or responsibility, is this not misleading? When someone lavishes attention on someone of the opposite sex with no thoughts of marriage in mind, is this not deceptive? True, no malicious motive may be involved. But does it not betray a measure of selfishness and a lack of concern for another person's feelings? Trying to sidestep the issue by saying,

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### **Learning that one's feelings are not shared can be a devastating emotional blow**

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'But we were just friends' or, 'I never made any promises,' will likely not sit well with the rejected one.

#### **Avoiding Problems**

Proverbs 2:7 advises young people to "treasure up practical wisdom." Wise youths therefore avoid letting friend-

\* Published in 1976 by the Watchtower Bible and Tract Society of New York, Inc.

ships with the opposite sex get too close —until they are ready for marriage. Group activities can be a wholesome way to avoid the problem of a romance developing. Even then, why confine yourself to a small circle of friends? After all, romantic feelings can develop even in a group. Another safeguard is to include an older person or two in group activities.

What, though, if in spite of safeguards, it appears that someone has developed unshared romantic feelings toward you? Clarify matters as quickly as possible so that both of you know where you stand. "Speak truth each one of you with his neighbor," recommends the Bible. (Ephesians 4:25) If openly expressing your feelings does not curtail matters, it might be best to keep your distance from this person. Do not reason: 'Well, things are quite clear now, so we can consider the matter closed. But there's nothing to prevent us from remaining good friends.' Romantic fires often continue to smolder, one person hoping the other will change his or her mind.

Following these suggestions may not be easy. But remember: The Creator has decreed that real intimacy with the opposite sex is reserved for marriage. "Jehovah God went on to say: 'It is not good for the man to continue by himself. I am going to make a helper for him, as a complement of him.' That is why a man will leave his father and his mother and he must stick to his wife and they must become one flesh." Jesus quoted those words and stressed the seriousness of marriage: "Therefore, what God has yoked together let no man put apart." —Genesis 2:18, 24; Matthew 19:5, 6.

Keep friendships with the opposite sex within reasonable limits, therefore, and avoid much pain and heartache.

# Make a Success of Nursing Your Baby!

**T**horoughly discouraged—that is how some mothers feel after attempting to breast-feed their babies in the first few days and weeks after giving birth. However, I found that with a little know-how and perseverance, nursing can be both successful and delightful. Allow me, therefore, to share what I've learned through reading, talking with other mothers, and personal experience.

## **"When should I begin nursing my baby?"**

As soon as possible after giving birth. In many cases you can begin right there on the delivery table. You might ask your doctor if this can be arranged. One of the advantages of natural childbirth, that is, childbirth without medication, is that the baby is born more alert and hence begins nursing more quickly.

## **"I do not have enough milk!"**

That is the claim of some new mothers. Indeed, sometimes a new mother is so anxious for the milk to come that it simply will not come. This happens because the muscles controlling the milk ducts tense up, preventing a free flow of milk. So you need to *relax*. Remember, too, that your milk production is stimulated by the act of feeding your baby. The more you nurse, the more milk you produce. So give your baby several small meals instead of one or two large ones. In three or four days, your milk production usually picks up sufficiently. Why, grandmothers have been able to nurse grandchildren in an emergency! And even some adoptive mothers have been able to produce milk by just letting their baby nurse.

## **"My baby wants to eat every two hours!"**

Another complaint of new mothers. They fear that their infant is not being satisfied by their milk. But it is perfectly normal for a newborn to nurse every two hours. Some infants nurse up to ten times in 24 hours! By the time the baby is two or three months old, it will probably have worked itself up to a three- or four-hour feeding schedule.

## **"What should I do in case of a breast infection?"**

Do not take your baby off the breast. Instead, nurse twice as often as usual on the infected side in order to keep the breast empty. The infection, you see, is likely in the milk duct and *not* in the milk itself. Your doctor may prescribe a mild antibiotic and recommend warm compresses and bed rest. I personally took 1,000 milligrams of vitamin C every two or three hours when I first noticed the infection, and by the second day it was cleared up.

## **"What if I run out of milk?"**

Impossible. The breast is a factory working 24 hours a day. Production can be slowed down, though, due to stress, fever, or emotions. The remedy is to *relax*, put problems out of your mind, and concentrate on giving of yourself to your baby. Nurse more often until your milk supply is ample again.

## **"Is there anything my husband can do to help out?"**

The biggest thing a husband can do is offer his love and moral support. He should bear in mind that having a baby is quite a shock to a woman's body. It takes her a while to recuperate. So he should remind her that her rest and the baby's welfare are more important than a perfectly kept house. Possibly he can lend a hand with shopping and doing the dishes in the meantime.

## **"How long should I nurse?"**

That depends upon you and your baby. Mother's milk is a complete food, and baby does not need anything else until about the end of five months. My personal goal for nursing my children was one year. Sarah, though, waited until Isaac was five years old to wean him!—Genesis 21:7, 8.

Nursing provides a wonderful opportunity for a woman to get acquainted with her baby and express her love for it. Remember, all too soon it won't be a baby anymore. So take advantage of those precious months while baby is small.—Contributed.

the jungle. It's not always easy to find them, as they are very shy and elusive. They are found throughout Suriname, from the coastal areas in the north to the dense jungle in the south.

# The Hair-Raising Jungle Chorus



cZoological Society of San Diego

**By "Awake!" correspondent in  
Suriname**

**I**T BEGAN as an eerie sound: "Rohooo, rohooo, rohooo." Then more voices joined in a moaning that built up to a long, vibrating crescendo like the roar of a gale blowing through a tunnel. The cries waned for a moment, only to burst out with renewed force. Finally the voices fell silent, and the echoes died away. Gradually the buzzing of insects and the chirping of birds filled the jungle air again.

I listened in amazement while sizing

up the performers of this hair-raising jungle chorus: five sturdily built *baboons*,\* as the red howler monkeys are called here in Suriname.

"Here in Suriname," a biologist told me, "you find them from the swampy coastal areas in the north to the dense jungle in the south. They live high up in the trees, especially in the forests along the rivers, in groups of four to

eight and sometimes more."

As I watched, the star performer, an old male standing almost three feet (0.9 m) tall, bigger and heavier than the other four, came closer and growled. His head, half of it consisting of a huge lower jaw, sat deep between his shoulders, giving him a hunched appearance.

The naked face contrasted with his orange-red body hair. And a distinct yellowish-orange beard proclaimed his dignity and covered the source of all those spine-tingling roars—his swollen throat.

\* Pronounced "baboons."

Why is it swollen? The Jivaro Indians have an amusing answer:

'One day,' goes the story, 'the howler showed the spider monkey how to break coconuts by pounding them together. When the spider monkey tried it, his thumbs got caught between the nuts and were lopped off. Determined to revenge his loss, he told the howler, "Don't crack them at all. They taste much better when swallowed whole." The howler followed his advice, but the coconut got stuck in his throat and left its mark on all his offspring, while the offspring of the spider monkey went without their thumbs.'

But when the Jivaro Indians shot a howler and looked inside its throat, there was no coconut. What did they see? A cup-shaped, hollow sound box of enlarged bones in the swollen throat. This built-in echo chamber, the size of a lemon, is 25 times bigger in the male *baboon* than the same body part in other similar-size monkeys, and it is unique among mammals. As

he contracts the muscles of his chest and stomach, air is forced across an opening in this hollow sound box, and his voice is amplified so much that it can be heard over two miles (3.2 km) away.

Observers have found that on moonlit nights the howlers get "talkative" and do not mind skipping their night's rest and disturbing yours. But don't think they will sleep in the next morning. Just before sunrise they are up for a howling, and at the end of the day the chorus lines up again for their embarrassingly off-key serenade.

Wildlife author Richard Perry adds that "a clap of thunder or sudden downpour, a passing aeroplane or even a flight of butterflies" will get them howling. You wonder: Do they ever take a break?

"They do," a former zoo director told me. "The two howlers in my collection loved to take sunbaths. They selected a barren branch, wrapped their tail around it, and stretched out belly down. With long arms and legs dangling loose, they dozed off."

But even sunbathing whips up an appetite. The old male decides it's time to eat. He makes a gobbling sound, and the others get up and follow him to another tree. All have a set place in the train—the leader up front and another male at the end. Secured in between are the females. Playful youngsters sometimes break ranks, but a reprimanding growl is enough to bring them back on the right path. And that path is always the same. One researcher wrote that they have their own traffic roads and follow a fixed route across the same horizontal branches. While feeding, they use their handy tail. Hanging by it with head down, they swing with arms and legs free, grabbing fruits, flowers, and seeds. However, many kinds of leaves—and lots of them—form their staple diet. But vegetarians, beware! Don't order from their menu!

An experienced naturalist told me: "Whenever you're lost in the jungle, you

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# *His voice is amplified so much that it can be heard over two miles away*



can survive by eating what the monkeys eat." However, the natives warn: "Whatever the spider monkey eats, humans can also eat, but not what the *baboon* eats. That's because the howler eats poisonous plants. So after a time their teeth get a brown color, like that of a chain smoker."

White or brown, all teeth are shown when other monkeys come too close to the group. They love their privacy to the point of being unsociable. But other monkeys don't care much for them either! When one animal collector felt pity for a lonely baby howler, she wanted to cheer him up by giving him a gentle female monkey as a companion. But the female "took one look at the ugly howler and started screaming as if she'd seen a bogeyman!"

William, a veteran hunter from Guyana, once spotted a howler with a stranger—the spider monkey. The two were standing on a branch facing each other. But it was cutthroat business. Recalls William: "Their tails were coiled around the branch for support, and their free arms were slashing out, grabbing at each other. They were screaming and biting, but the howler had the upper hand." Were they still arguing about that coconut?

Even other red-howler groups are told, 'Mind your own business.' When one group of *baboens* dares to invade another's territory, a vocal battle explodes that lasts until one group retreats. Conclude most researchers: "Keep your distance!" is the main message of the jungle chorus.

## ***The "Parson" in Charge***

The howling may sound like bedlam to us, but actually it has arrangement. "The *domri* [parson] is the chorus leader," said

Raymond, a gold-seeker who observed howlers around his bush camp.

"*Domri?*" I asked.

"Yes, so we call the old male. In the church here it's the custom that the *domri* sings the first verse of a hymn, and then the other church members join him. The *baboens* do the same."

Raymond further explains that before the chorus begins, the leader walks up and down and looks gloomily at the members of the group, like a stern conductor inspecting his orchestra. When satisfied, he starts warming up with a series of chesty roars. Then the others add their howling, their lips shaped into a funnel as they gravely look at each other. "It's really funny," says Raymond, "those glum faces. All work and no play."

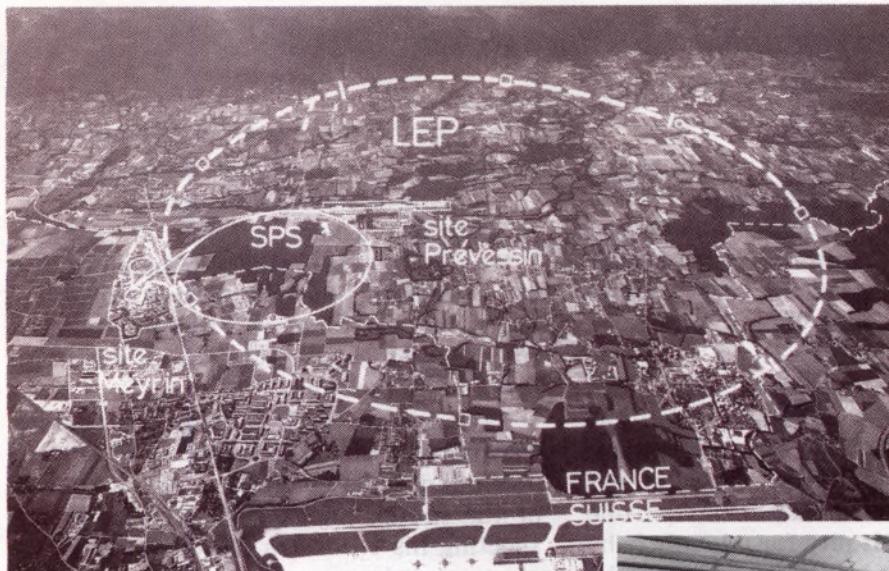
## ***Their Enemies***

There are moments, though, when even the conductor forgets about order. When jaguars or harpy eagles attack, there is utter confusion, with all chorus members jumping helter-skelter for their lives and even swimming across a river to get away.

However, the howlers' most dangerous enemy is man. Although the howlers are protected by law, they are hunted for their meat. 'In one Amerindian village with a population of 450 persons, 56 howlers were shot and eaten in one month,' revealed one study. No wonder that in some areas their numbers are decreasing. And those that survive retreat deeper into the jungle.

But whenever their chorus swells from faraway hiding places, they remind us that they are still there—broadcasting their cry: 'We are here. Keep your distance!'

Will man get the message?



# GIANT MACHINES, Minute Particles

**I**MAGINE crossing the border between France and Switzerland thousands of times in a few seconds! 'Impossible,' you may say. Yet, a new strain of "borderers" are doing just that by the billion. They are minute particles hurtling along inside a giant metal ring deep in the ground at a European laboratory not far from the international airport of Geneva, Switzerland. There, huge machines called particle accelerators are helping physicists in a field of research that has long intrigued man: the secrets of matter and the laws governing the universe.

## ***Peering Into the Infinitesimal***

For thousands of years, man has dreamed of discovering the basic com-



CERN photos, Geneva

ponents of matter. At the beginning of the 20th century, scientists discovered that the atom, once thought to be the smallest fragment of matter and therefore indivisible, is made up of electrons revolving around a nucleus. It was later found that the division can go further, and now one theory is that all matter in the universe is made up of only three basic building blocks: electrons and two types of quarks, in a void.

When archaeologists discover an ancient wall, they analyze not only the bricks but also the cement used to hold them together. Similarly, modern physicists analyze the forces acting between particles. Researchers explain that two particles can be

linked by exchanging a third one, somewhat in the way a ball is exchanged between two players. And just as different types of balls are used in different games, such as football, basketball, and baseball, each force, in the same way, has its own carrier-particle (or set of carriers). A study of these two types of particles (bricks and cement, players and balls) requires the use of accelerators.

Without accelerators, modern physicists would be as helpless as botanists without magnifying glasses or astronomers without telescopes. Facilities grouping several interconnected accelerators are located at CERN (European Laboratory for Particle Physics), spanning the Franco-Swiss border. Maybe we will better understand what goes on inside one of these machines if we make ourselves one million billion times smaller! Now we can follow our most unusual guide.

### **Journey in the Core of an Accelerator**

Hello! I'm just one of the billions of protons accompanying you on your journey in the SPS (Super Proton Synchrotron), CERN's largest accelerator at present. Please try to keep up, for we will be traveling over a million kilometers (620,000 mi) in less than five seconds!

Before entering the SPS proper, we must undergo preliminary acceleration in smaller machines, in order to reach over 99 percent of the speed of light in a vacuum (300,000 kilometers [186,000 mi] per second), a speed that we cannot exceed. The SPS will raise our speed by only 0.4 percent. On the other hand, our

### **What Are They?**

**Electrons:** Particles with a negative electric charge equal to that of the proton and a mass nearly 2,000 times less. An electron moves about the nucleus of the atom, with the number of electrons matching the number of protons.

**Protons:** Particles with a positive electric charge equal to that of the electron. A constituent of the nucleus of every atom. The nucleus of hydrogen has one proton.

**Neutrons:** Particles with nearly the same mass as the proton but with no electrical charge. The other constituent of the nucleus of all atoms except those of hydrogen.

**Quarks:** Particles believed to be the basic constituents of protons and neutrons. Quarks do not exist singly but always in combination with other quarks. Each has an electric charge, either one third or two thirds that of the electric charge of the electron.

**Bosons:** Particles that transmit forces between other subatomic particles. A boson that leaves one particle is absorbed by another.

### **Energy Transforms Into Matter**

**Speed and Energy:** A tennis ball falling on your foot will not injure you. But if it comes fast and hits you on the nose, it could hurt you badly. Why? Because the faster the ball moves, the more energy it carries, and this energy is released upon impact. Therein lies the main purpose of an accelerator: to impart high energy to particles by accelerating them to high speeds.

### **Concentrated Energy Turns Into Matter:**

Transformation of energy into matter is not a question of *quantity* but of *concentration*. If you have a sufficient number of high-energy, fast-moving particles concentrated into a small volume, they can produce new particles (or matter) by colliding with some object or with each other.

### **Matter, Yes, But in Minute Quantities:**

Energy-voracious accelerators do not produce much matter. According to an official CERN publication, "no more than a milligram [0.000035 oz] of matter has been produced in 25 years of experiments."

mass will greatly increase, resulting in an energy jump from 10 GeV to 400 GeV,\* and that is the result the physicists are after. So the SPS is not an accelerator in the literal sense of the term but is more like a sling whirled around at a constant speed but whose stones get heavier as they move.

We have now entered the SPS beam pipe. The entire ring, nearly seven kilometers (4.3 mi) in circumference, is housed in an underground tunnel several meters wide, where technicians can move around on bicycles when the accelerator is not in operation.

As soon as we enter the tube, we are taken in hand by 744 bending magnets. These powerful electromagnets keep us on an almost circular path. Otherwise, we would fly straight into the thick walls that absorb the dangerous radiation we give off. Since we tend to spread, we must be squeezed into a dense, narrow beam by another system of 216 focusing magnets. These could be compared to lighthouse lenses that concentrate light into a far-reaching, narrow beam.

To make our journey possible, a very high vacuum has been produced in the tube, eliminating most of the particles we would otherwise have collided with. Each time around, we receive an additional supply of energy when speeding through 20-meter-long (66 ft) radio-frequency cavities in a long straight section. The electromagnetic wave generated there im-

\* In chemical reactions, the energy brought into play is just a few electron volts. One GeV equals one billion electron volts.



### Recipe for Making a Cow

"Cows are not complicated to make. You just need a large amount of basic constituents—*u* and *d* quarks and electrons. First of all, make your protons. You will need two *u* quarks and one *d* quark; then make some neutrons, using one *u* quark and two *d* quarks. You will now compose your atoms. For a cow, you will require mainly carbon, oxygen, hydrogen, and nitrogen atoms . . . The recipe for a hydrogen atom is quite straightforward: one proton with one electron circulating around it. Carbon is more complicated . . .

"Now the atoms must be assembled into molecules. Water is easy to make. Mix one oxygen and two hydrogen atoms. But for other molecules, hundreds or even thousands of atoms are required. Last of all, use these atoms to build a few tens of billions of living cells, and carefully assemble them into a cow.

"This is the recipe CERN supplies. It is strictly accurate if you take into consideration the time factor and the mysterious blueprint design that succeeded in producing a cow."—*L'Express*, French weekly magazine.

But who could have drawn up such a "mysterious blueprint"? Only a supremely intelligent Being, the One the Bible identifies as the Creator, Jehovah God.—Psalm 104:24.

parts some of its energy to us, rather like an incoming ocean wave imparts speed to the surfer riding it.

It will now take us just over half a second to leave the accelerator in bundles of ten thousand billion. Deviated from our trajectory, we will be bombarding a target that may be a metal plate, a gas, or a liquid, depending upon the type of exper-

iment. A portion of the energy released in the collision between protons and target particles will be converted, generally for a fleeting instant, into matter. This is just about the opposite of what happens in a nuclear reactor, where matter is converted into energy. Powerful computers linked to complex detectors then analyze particles produced in the collision.

The time has come for me to say goodbye. But if you have a few minutes to spare, there is an even more exciting experiment in store for you.

### **Colliding-Beam Machines**

The protons that just exited have now smashed against a stationary target. However, much of their energy was wasted, being transferred to the target particles that recoil when hit. That is why 400 GeV protons smashing into other protons of stationary targets release only 28 GeV for producing new particles.

Researchers investigated the problem. In order to increase available useful energy, they came up with the idea of colliding beams. In the SPS, a beam of antiprotons (particles with the same mass as protons but with opposite electrical charges) is brought into head-on collision with a contrarotating beam of protons. When a proton and an antiproton of 270 GeV collide, practically the entire 540 GeV of energy becomes available for producing much heavier particles.

Having mastered problems pertaining to the making, accumulating, and accelerating of antiprotons, in 1983 the CERN physicists were able to provide evidence of the existence of very unstable particles called W and Z bosons. Like most of the particles generated in these accelerators, these bosons do not live long—less than a trillionth of a trillionth of a second—before they dissolve into energy or transform into other particles. One hundred

times heavier than protons, Z bosons are the most massive particles so far discovered.

### **Ever Larger Machines**

The hunt for more massive new particles is on the world over, especially for force carriers (the playing balls we mentioned at the start of the article). Consequently, better, ever more powerful machines are required. So in 1983, construction of a new ring got underway at CERN, near Geneva. They call it LEP (Large Electron-Positron [Collider]), a machine 27 kilometers (17 mi) in circumference, designed for accelerating electrons and positrons (anti-matter counterparts of electrons). These new particle "cannonballs" should provide physicists with a new tool, a finer lancet as it were, for dissecting matter.

'But what's the use of all these machines?' you may ask. True, apart from a few small accelerators used in hospitals to produce particles for destroying cancerous cells or as radioactive tracers, the technical spinoffs seem limited. However, physicists are still desirous of finding a better answer to the question: What is matter? So no doubt they will continue peering into the world of the infinitesimal, paradoxically by means of ever-larger giant accelerators.

## **In Our Next Issue**

- *How to Break  
the Cigarette Habit*
- *Our Little Linda's Defective Heart*
- *Fetishes  
—Can They Protect You?*

# From Our Readers

## Improving Reading

I really appreciated your article "You Can Be a Better Reader!" (August 22, 1984) Previously I used to read articles but did not get much out of them because I really just glanced over them rapidly. As a result, I could not remember much of what I had read. But now, thanks to that article, I get much more out of my reading. Thanks a lot.

A. B., Brazil

*See also our issue of September 8, 1985.  
—ED.*

## Child Molesting

I wish to express my deep gratitude for your articles on child molesting. (January 22, 1985) I used the articles to explain to my eight-year-old twin daughters exactly what sexual abuse was. To my horror, they then said: "We know someone that happened to." It was their eight-year-old cousin. My niece had confided in them, but no one else knew. We were able to handle the matter immediately and put an end to it in its early stages—hopefully before too much damage was done. Thank you!

S. S., Minnesota

## Peace in the Family

Your issue on "Peace in the Family" (January 8, 1986) came at the very time it was needed. In a heated discussion with my husband, I took that magazine out of its wrapper just enough to see what it was about. I could hardly believe it. I opened it up and started reading. The article "It's All His Fault!" was just what I needed to read because I was sure that it was his fault. I read it again later and I realized how much

at fault I was. Thank you so much for these articles on families. Please continue; they have helped so many times.

S. F., Florida

## Collecting Shells

During my many years in East Africa, I have seen people collect live shells and destroy the animal inside, and now the shells [mollusks] are gone. If people would just take the dead shells, OK, but now there is a greed for everything that has a shell. In most places where we had thousands of shells, not one is to be found anymore.

H. L., Kenya

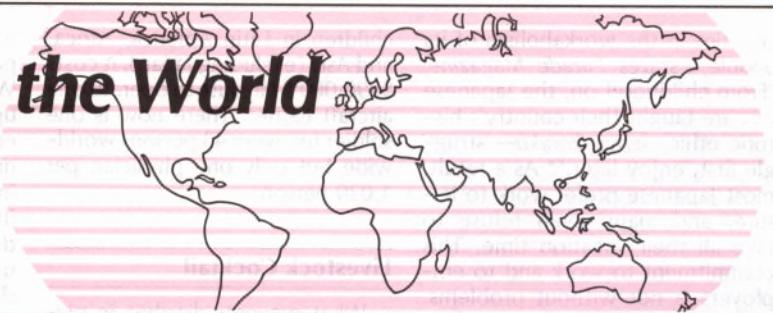
*We did not intend to encourage the wanton destruction of live mollusks just to get shells for ornaments. Collecting dead or empty shells can be a delightful hobby. The instructions on cleaning shells could apply to cleaning shells of dead mollusks, though likely that part could have been more carefully worded.—ED.*

## Getting a Job

Many times the "Young People Ask" articles help those of us who are not so young. I am referring to the article "How Do I Handle a Job Interview?" (February 8, 1983) The company that employed me for 12 years had announced it would close soon, and since I had passed the 40-year mark with some diminished physical abilities, the idea of looking for work was not appealing. But thanks to the ideas presented to the young people, this middle-aged has a new job after only four résumés were sent out, and on the first interview. Again, my warm thank-you.

R. H., Michigan

# Watching the World



## African Crisis

Two decades of famine, drought, and debt have produced an "extraordinary crisis" in Africa—so severe that it "can be compared to the effects of a world war," says a U.S. report by the Committee on African Development Strategies. It adds: "Its proportions are mythic, its severity almost impossible for the rest of the world to imagine or comprehend." As reported in *The Express* of Easton, Pennsylvania, the panel's findings noted that the African "continent contains more than 20 of the world's poorest 34 countries," the world's highest population growth rate, and "a critical shortage of trained professionals." Agricultural production, already unable to supply Africa's needs, is expected to decline in some of the African nations. The panel made a number of recommendations that will require "sacrifices," noting that "Africa's situation is not hopeless."

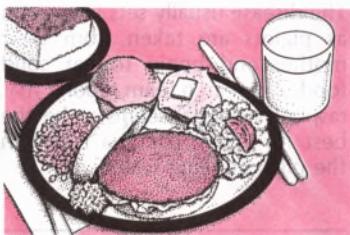
## Young Smokers

More children smoke than do adults, according to a recent South Australian survey. The survey of 3,000 schoolchildren was sponsored by the Australian Cancer Society. As reported in *The Australian*, when asked if they had smoked the previous week, 40 percent of the 16-year-olds admitted to having done so. Only

27 percent of adults say they smoke. A number of younger children—8 percent of 15-year-olds and 1 percent of 12-year-olds—even claim to be chain-smokers. Overall, more girls than boys smoked. Most of the students believed they could give up smoking any time they wished.

## Nutrition at Work

From large multinational corporations to small family-run establishments, businesses and manufacturers in the United States are



promoting good nutrition at the workplace, reports *The New York Times*. The advocates claim that on-the-job nutritional and physical fitness programs lower their employee health-care costs, improve work output, and create a happy work force. "The programs may be as simple as changing the cafeteria menu to a more healthful selection of food or as elaborate as . . . a 37,000-square-foot [3,440-sq-m] physical fitness facility with swimming pool, exercise equipment, gymnasium and

cardiac rehabilitation program," says the article. Many corporate cafeterias now provide calorie and cholesterol counts on foods they serve. They also supply a menu that is low in fat and sodium and high in fiber for workers who have problems related to heart disease.

## Goodbye, GMT

In 1884, Greenwich mean time and the Greenwich meridian became the standard for timekeeping and navigation worldwide. Actually, the Royal Greenwich Observatory began keeping time in 1675 so that sailors could have a standard by which to set their clocks before embarking on their voyages. Today it costs about \$100,000 (U.S.) a year to keep the observatory's six atomic clocks running and \$30,000 (U.S.) apiece to replace each cesium vacuum tube. Britain has now decided that the money can best be spent elsewhere, and the tubes will not be replaced as they fail. However, the time standard will still be kept by Coordinated Universal Time, based in Paris. It comes from readings from 150 atomic clocks worldwide—of which the Greenwich Observatory supplied but a part.

## Japan's Workers

"One of the basic reasons for Japan's mounting industrial suc-

cess lies in the workaholism of its people," states *Parade Magazine*. "From childhood on, the Japanese . . . are taught their country's historic ethic, *senyu koraku*—'struggle first, enjoy later.' As a result, most Japanese prefer work to leisure, and many even refuse to take all their vacation time. This commitment to work and to employers is not without problems. "Almost half of the workers of Japan who take time off work do so because of stress," says the *Mainichi Daily News*, "while as many as one in 20 . . . suffers from stress-related conditions including stomach ulcers and angina." Some sort of stress was reported by 72.5 percent of the women and 62.9 percent of the men of the 60,000 workers surveyed. It was highest among those in administrative positions who put in over 30 hours of overtime a month.

### Military Expenditures

What is the continuing arms buildup costing mankind? In *World Military and Social Expenditures 1985*, author Ruth Leger Sivard gives these statistics: Military outlays since World War II add up to \$17 trillion (at 1982 prices and exchange rates)—six times more than the annual income of the 3.6 billion people in the Third World. About \$3 trillion to \$4 trillion has been spent on building nuclear arsenals, which today are so powerful that every person now living could be killed 12 times over. Military expenditures are now \$800 billion a year. The Soviet Union alone spends more in one year for military defense than is spent for education and health care in all the developing countries, while the budget for the U.S. Air Force exceeds the total budget for education of the 1.2 billion

children in Latin America, Africa, and Asia (excluding Japan). It costs \$590,000 a day just to operate one aircraft carrier. There now is one soldier for every 43 persons worldwide but only one physician per 1,030 persons.

### Livestock Cocktail

What prevents diarrhea in piglets? Cordials—or at least that is the conclusion of one Western Australian pig farmer. Since he has added this sweetened alcoholic



beverage to his piglets' drinking water when they are weaned, not one piglet has died from diarrhea. The disease usually sets in as soon as piglets are taken from their mother and begin to eat solid food. A research team reports that raspberry cordial seems to be the best for killing bacteria found in the pigs' drinking water.

### Piracy Worsening

"Piracy and armed robbery at sea have worsened" during 1985, reports *The Guardian* of London. The International Maritime Bureau identifies three particularly dangerous zones: West African coastal waters, the South China Sea, and the Caribbean. Some of the worst attacks occurred in the Gulf of Thailand, where refugees in small boats have been raped and murdered. In one savage attack in mid-December 1985, 50 Vietnamese boat people fleeing

to Malaysia were killed in a rampage of robbery and rape. Off West Africa, organized gangs of up to 30 armed men have boarded anchored container ships at night, tying up the crew and looting the cargo. Yachts in the Caribbean have been hijacked by drug traffickers. The bureau is urging governments to crack down on the pirates and destroy their coastal bases.

### British Child Abuse

The number of child-abuse cases in Britain has risen dramatically, according to the latest yearly report issued by the National Society for the Prevention of Cruelty to Children. Between 1979 and 1984 the physical abuse of children increased by 70 percent in England and Wales. The sharpest increase was in the number of children who were sexually abused. The society estimates that 7,038 children under 15 years of age were physically abused in 1984 and that parents were responsible for the death of at least one child a week. "More children are murdered by their parents than by psychopaths," reports *The Guardian* of London. Unemployment, marital troubles, and debts were cited as trigger factors leading to child abuse.

### Aerial Search

Six Melbourne supermarkets have literally been up in the air over their missing trolley problem—the estimated 35,000 shopping trolleys (carts) that are not returned to the stores each year. At a cost of \$150 (Australian) to replace each trolley, supermarket losses are quite high. So they hired a helicopter to fly over the city and locate the missing trol-

leys. In just a four-hour search of the western suburbs, 110 trolleys were retrieved from such places as unused lots, backyards, and even creeks. The supermarket chains expect to recover at least 500 in the week-long aerial search that will cover most of the city.

### **Uncertain Surgery**

About 11 million Americans suffer from myopia, or nearsightedness. Some 150,000 of them have resorted to radial keratotomy to correct it. The procedure, introduced in the U.S. in 1978, flattens the cornea by a series of tiny incisions around its perimeter. However, recent findings show the operation to have some serious drawbacks. For instance, it cannot be predicted just how

much vision will improve. Also, as the cornea heals it changes shape, altering the vision. So, treated eyes may end up being overcorrected or undercorrected. And as it sometimes takes years for a cornea to heal, vision may fluctuate for months afterward and often ends up being different in each eye. Additionally, long-range problems can result from the weakened cornea. The operation "is definitely in its developing phase and needs to be refined so the outcome is more predictable and safer in the long run," says ophthalmology professor George Waring.

### **Work Ethic**

The average unemployment rate in Switzerland since 1960 has

been 0.14 percent. It was officially listed as zero percent between 1968 and 1975. The highest it has been since World War II was 1.1 percent in 1984—considered by many in Switzerland to be somewhat of a crisis. What accounts for such a high rate of employment? As reported in *The New York Times*, a study by three economists at the University of Geneva pointed out such factors as the country's small size, smaller industries spread throughout the land, a trade-oriented economy, and a 1937 agreement that requires arbitration of disputes and that limits strikes. "There are many reasons however which just cannot be quantified," says Alain Schoenenberger, one of the study's authors. "My feeling is that here in Switzerland, work means something."

