

Awake!

June 22, 1993



WORKING HARD
Always a Virtue?



Working Hard —Always a Virtue? 3-11

When one's work is put before all else, what are the consequences? How can working hard be, not a liability, but a real virtue and a source of happiness?



Joshua's Wish 15

A cancer patient, seven-year-old Joshua, was granted a wish. Read about what he wished for and how it was fulfilled.



Birdsong —Just Another Pretty Tune? 18

Why do birds sing? Do the songs have meaning? How do the birds learn their songs? You may be surprised at the answers.

T. Ulrich/H. Armstrong Roberts

Working Hard —What Are the Consequences?	3
Working Hard —Hazardous to Your Health?	4
Working Hard —When It Is a Virtue	8
Young People Ask . . . What About Hanging Out?	12
Meeting the Challenges of the 21st Century	21
Japanese Gardens —Nature in Miniature	25
Watching the World	28
From Our Readers	30
Where Cows Fly	31
Your Example Affects Others	32

WORKING HARD

What Are the Consequences?

By Awake! correspondent in Japan

STAMINA drinks' have become hugely popular, with more than 200 brands available and total sales of 900 million yen a year," reports *Mainichi Daily News*, Japan's leading newspaper. The popularity of these products, which are said to provide instant energy boosts for fatigued workers, "attests to the Japanese drive to perform on the job despite stress, lack of sleep and stifling summer weather," continues the report.

On the other side of the Pacific, "nearly one American in eight reported working 60 hours or more a week," according to the U.S. Bureau of Labor Statistics. Those who hold middle management positions find it necessary to devote so much of their time and energy to work that their job sometimes becomes the controlling factor in their lives.

In nearly every culture, individuals who are industrious, conscientious, and hardworking are extolled as virtuous. Even an ancient Bible writer said: "With a man there is nothing better than that he should eat and indeed drink and cause his soul to see good because of his hard work. This too I have seen, even I, that this is from the hand of the true God." (Ecclesiastes 2:24) By and large, people everywhere still subscribe to such values. Whether they consider it virtuous or not, most people work from morning till night, five, six, or even seven days a week.

What, though, has all this hard work achieved? In countries such as Japan and Germany, the economic "miracles" brought



about since the end of World War II are the envy of developing nations. Both nations rose from defeat to become economic powers that the rest of the world has to reckon with.

However, what has devotion to work done to many individuals?

Although the standard of living in Japan has gone up considerably, the *Mainichi Daily News* reports, most Japanese "still find it difficult to feel any real sense of affluence in their daily lives." Worse still, in their relentless pursuit of the so-called good life, many are falling ill or even dying from excessive work and stress. Similarly, in a study in the United States, one third of three thousand managers surveyed felt that they work too hard, were burned-out, and could find no enthusiasm for their work.

Workingwomen are also sending out distress signals. An Italian survey revealed that workingwomen in that country labor an average of 30 hours more than their mates each week. In addition to spending long hours in the office or factory, they have to care for household chores when they return home. A female worker confessed to the magazine *Europeo*: "My social life is practically nonexistent. I have no time for myself. I can't take it any more."

What about family life? "In chasing the American dream, we're sacrificing self and family for money and power," says Herbert Freudenberg, a New York specialist in dealing with work burnout. As a result of their

husbands' being wrapped up in work, some wives of British businessmen who work abroad reportedly feel isolated and unhappy. But in this they are by no means alone.

Consider the consequences to family life in Japan, where less than half of all middle-aged white-collar workers get home before eight in the evening. Some wives have already given up on their husbands as real marriage mates; they no longer want them around any more than they are. A television commercial summarizes the wives' disappointment, saying:

"Husbands are best healthy and away from home."

From the foregoing, it is clear that working hard has both a positive side and a negative side. When taken to the extreme, it can become a liability. So how can working hard be, not a burden, but a real virtue and a source of happiness?

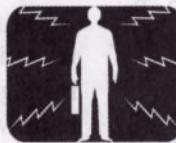
On the other hand, just how serious is it when individuals put work ahead of all else or push ahead at all costs? Let us take a closer look at these aspects of working hard.

WORKING HARD

Hazardous to Your Health?

FALLING against his car, a middle-aged insurance salesman vomited and collapsed. He was still clutching his briefcase, the symbol of his work. Laboring under his company slogan, "Now is the crucial point. Exert your power to 150 percent of its capacity," he had covered some 2,000 miles in his car during the month he collapsed. Four days later, he died.

This is not an isolated case. "Corporate warriors," as they are termed in Japan, are



haunted by the nightmare of *karoshi*, or death from overwork. A lawyer specializing in such cases estimates that there are "at least 30,000 victims of karoshi in Japan every year." No wonder over 40 percent of Japanese office workers recently surveyed feared possible death from overwork.

Though it may be hard to prove the link between overwork and health problems, the victims' families have little doubt. In fact, the phrase "death from overwork" was coined in

Awake!

Why Awake! Is Published *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 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 before the generation that saw the events of 1914 passes away.

Would you welcome more information? Write Watch Tower at the appropriate address on page 5. This is part of a worldwide Bible educational work that is supported by voluntary donations.

Unless otherwise indicated, *New World Translation of the Holy Scriptures—With References* is used.

Awake! (ISSN 0005-237X) is published semimonthly 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 *Awake!*, c/o Watchtower, **Walla Walla, N.Y. 12589.** Printed in U.S.A.

the compensation claims filed by bereaved families. "From a medical point of view," says Tetsunojo Uehata of the Institute of Public Health in Japan, "it refers to a death or disability from cerebral apoplexy, myocardial infarction, or acute heart failure as a result of burdensome labor aggravating hypertension or arteriosclerosis." A recent report by Japan's Health and Welfare Ministry warns that constant overtime work robs one of sleep and eventually leads to bad health and illness.

Yet, just as smokers hate to admit to dangers in smoking, and alcoholics to dangers in alcohol abuse, workaholics are loath to acknowledge the hazards of unreasonably long hours of work. And death is not the only hazard.

Burnout and Depression

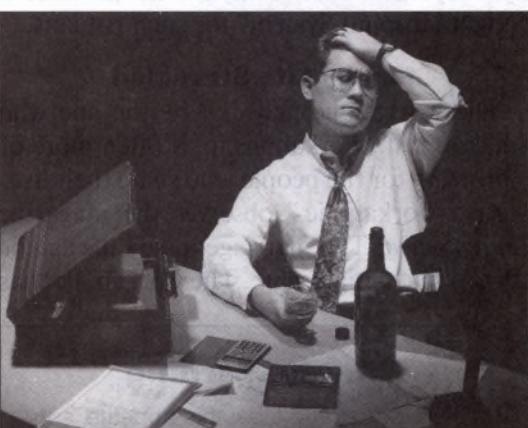
While some workaholics fall victim to disability and death, others succumb to burnout. "Burnout has no precise medical definition," explains *Fortune* magazine, "but the commonly accepted symptoms include fatigue, low morale, absenteeism, increased health problems, and drug or alcohol abuse." Some victims become hostile, while others start making careless mistakes. How, though, do people become victims of work burnout?

Generally, it is not the maladjusted or emotionally disturbed who do. Often it is people who care deeply about their job. They may be struggling to survive fierce competition or toiling to climb the corporate ladder. They work long and hard, trying to take full control.

But when unwavering devotion and nonstop work do not produce the expected satisfaction and reward, they are disillusioned, feel worn-out, and become victims of work burnout.

What are the consequences? In Tokyo a telephone service called Life Line, set up to help would-be suicide victims, is getting more and more calls from desperate middle-aged and older office workers. Of the over 25,000 suicide victims in Japan in 1986, an amazing 40 percent were in their 40's and 50's, and 70 percent of these were male. "It is because depression among middle-aged wage earners is on the increase," laments Hiroshi Inamura, a professor of psychiatry.

Then there is what has been styled holiday neurosis. The symptoms? Irritation on



**Work burnout sometimes
leads to severe problems**

Semimonthly Languages Available by Mail:

Afrikaans, Arabic, Cebuano, Czech, Danish, Dutch, English (also cassettes), Finnish, French, German, Greek, Hungarian, Iloko, Italian, Japanese, Korean, Norwegian, Portuguese, Slovak, Spanish, Swahili, Swedish, Tagalog, Yoruba, Zulu

Monthly Languages Available by Mail:

Chichewa, Chinese, Cibemba, Croatian, Ewe, Gujarati, Hiligaynon, Igbo, Indonesian, Kannada, Malayalam, Myanmar, New Guinea Pidgin, Polish, Romanian, Russian, Sepedi, Serbian, Sesotho, Shona, Sinhalese, Slovenian, Tahitian, Tamil, Thai, Tsonga, Tswana, Turkish, Twi, Ukrainian, Xhosa

Subscription requests should be sent to Watch Tower at the appropriate address below.

America, United States of,
Wallkill, N.Y. 12589

New Zealand, P.O. Box 142,
Manurewa

Australia, Box 280, Ingleburn, N.S.W. 2565

Nigeria, P.M.B. 1090, Benin City,
Edo State

Canada L7G 4Y4, Box 4100, Halton Hills
(Georgetown), Ontario

South Africa, Private Bag 2067,
Krugersdorp, 1740

England NW7 1RN, The Ridgeway, London
Ghana, Box 760, Accra

Zambia, P.O. Box 33459, Lusaka
10101

Jamaica, Box 180, Kingston 10

Zimbabwe, 35 Fife Avenue, Harare

© 1993 Watch Tower Bible and Tract Society
of Pennsylvania. All rights reserved.

Changes of address should reach us 30 days before your moving date. Give us your old and new address (if possible, your old address label).

holidays from not doing anything. Driven by compulsion to work, the work devotee's conscience troubles him on days off. Unable to find peace of mind, he paces around his small room just like an animal in a cage. When Monday comes, off he goes to the office, relieved.

A unique type of depression that is now sending middle-aged workers to the doctor is the so-called home-phobia syndrome. Worn-out workers linger around coffee shops and bars after work. Eventually, they stop going home entirely. Why do they fear returning home? Though unsympathetic spouses may be a factor, "many had been working too hard and lost the ability to adjust to the outside world, even in many cases to their own family," says Dr. Toru Sekiya, who provides a "Night Hospital System" for such patients.

Family Life Strangled

The workaholic may not be the one who suffers most. Workaholism "is often more of a problem for the people who share their lives with a workaholic," observes the magazine *Entrepreneur*. The marriage mate's life can be turned into a nightmare. The workaholic "has

Timely Warning

"If your husband loses his appetite, suffers sleeplessness, refuses to talk, then he is sending warning signals. Tell him to find pleasure in something other than work and to try to meet with non-company people."
—Dr. Toru Sekiya, Sekiya Neurology Clinic, Tokyo, Japan.

"I like to work long hours, but if you have to lose your husband or family in the process, you're doing things the wrong way. It's no fun to count your money by yourself."
—Mary Kay Ash, chairman of Mary Kay Cosmetics.

already found the love of his or her life," says the magazine *The Bulletin* of Sydney, Australia, "and accepting second place in line isn't always easy." What happens in such a marriage?

Take the case of Larry, an American employed by a Japanese corporation in the United States. He worked long hours of overtime without being paid for it, increasing the factory's productivity 234 percent. Success and happiness? "Crazy!" exclaimed his wife in court as she divorced him.

Even worse was a Japanese business executive who left for work at five each morning and did not come home before nine at night. His wife began to drink excessively. One day, quarreling over her drinking, the man strangled his wife. The judge pronounced him guilty of homicide and said: "Completely devoted to work, you did not realize the loneliness of your wife and did not put forth enough effort to give her reasons to enjoy life."

Strangling one's mate is an extreme result, but overwork can snuff out family life in other ways. When the husband is home on Sundays, he may just lounge in front of a television set tuned to his favorite sports program and drowse away the whole afternoon. These husbands do not realize how out of touch with other aspects of life they have become. Overwhelmed by their work, they neglect a most valuable thing in life, their family. Ignoring the need for family communication, they are paving a sure way to a lonely retirement.

Old but Unsatisfied

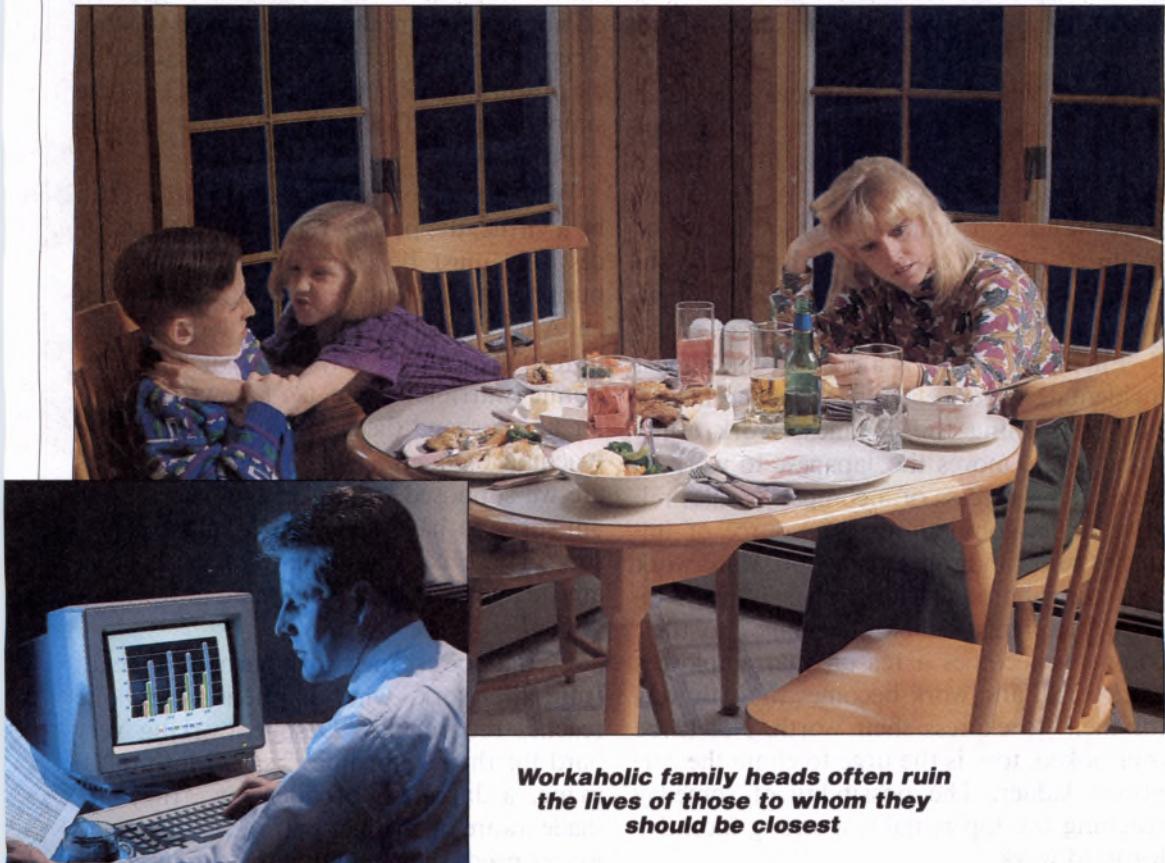
The book *At Work* sounded a warning in its introduction: "In our society, . . . so strong is the link between work, self-esteem and social position that, on retirement, some find it extremely difficult to adjust to a life free of their former work roles." Those who center their

lives on work must ask themselves this question: 'What will I have left if my work is taken away?' Remember, when a person retires, his life may revolve around his family and community.

Those who have neglected the need for communication with their family and neighbors are at a loss after retirement to know what to talk about with them. "They are paying the bill for refusing to look at anything but work, are they not?" says a veteran counselor for middle-aged couples in Japan. "Their life lacked the human aspect, and they took everything for granted just because they were the breadwinners. When they retire, however, the tables seem to be turned."

Those 30 or 40 years of hard work, supposedly for the family, can backfire. How sad if after years of hard work, former breadwinners are looked upon as "industrial waste" and *nureochiba* (wet fallen leaves) by their families. The latter expression is used in Japan to describe retired husbands who have nothing to do but hang around their wives all day. They are thus likened to wet fallen leaves that stick to a broom and cannot be shaken off, nothing but a nuisance.

Considering all the hazards involved, it is natural to ask, How can working hard be truly virtuous? Is there a work that brings real satisfaction? Our next article in this series takes up these questions.



**Workaholic family heads often ruin
the lives of those to whom they
should be closest**

WORKING HARD

When It Is a Virtue

ALL over Southeast Asia, many young servant girls put aside their kitchen work and sit glued to their television sets when the Japanese-made TV serial *Oshin* comes on. It is a rags-to-riches story of a woman who succeeds after enduring many years of toil and hardship. With tears in their eyes, the girls identify with Oshin, the heroine. The episodes seem to be just what they need to help them face another day of hard work.

Indeed, when people slave away day after day to the point of jeopardizing their health and life, they must have reasons for doing so. Why do they do it? As with the Asian servant girls, wanting to improve one's standard of living is surely a common and powerful incentive to work hard. Apparently, though, material reward is not all that is involved.

"Financial reward is a desired, but almost incidental, incentive," writes Stephen D. Cohen concerning the Japanese work ethic. What, then, moves the Japanese to work so hard? "The success of a company's sales relative to its competitors is a source of immense pride and self-satisfaction. Hard work that contributes to this end is its own reward," explains Cohen. Allegiance to their company becomes a reason that employees work hard, and work becomes the only way for them to express their worth. Not to be overlooked, too, is the urge to climb the corporate ladder. The possibility of someday reaching the top remains a strong incentive for hard work.



Reasons to Risk One's Health?

Are these proper reasons to put one's health and life on the line? Of the one who works hard for material riches, the Bible points out, "his eyes themselves are not satisfied with riches." Eventually such a person may come to wonder: "For whom am I working hard and causing my soul to lack in good things?" (Ecclesiastes 4:8) Those who work hard to get rich do not seem to know when or where to stop. They get themselves trapped in a vicious circle of work, work, and more work. The Bible simply warns: "Do not toil to gain riches." —Proverbs 23:4.

What about company loyalty? While it can be a virtue, the possible effect of working excessively must be considered. "If a guy is burning out," one chief executive officer of an American company said, "I don't want him on my team anyway." The wife of a "corporate warrior" wrote to a newspaper after her husband died from overwork before reaching the age of 40: "What condolences are we supposed to find in their claim, 'We are sorry to have lost such a valuable person'? Those corporate martyrs, once dead, are treated as if they were mere 'throwaway goods.'"

Even if one escapes work burnout or death from overwork, what happens when one reaches retirement? "Despite working very hard for their companies," says Motoyo Yamane, a Japanese broadcaster, "they are made aware of the fact that the company no longer needs them and that they are useless."

To the impersonal company, hardworking employees are only cogs in the wheels of their corporate mechanism, to be replaced when they are worn-out. No wonder many Japanese are losing faith in their companies! They begin to realize that their devotion to the company is a love that is unreturned.

What can be said about ascending the corporate ladder? Those who have reached the rung of middle management soon realize that not everybody will make it to the top. What happens then? Robbed of prospects for promotion, they start to job hop. So much for loyalty and virtue!

Balanced View of Working Hard

Although hard work prompted by love of money, loyalty to a corporation, or a competitive spirit ultimately frustrates and disappoints, the Bible does not brush aside the value of hard work. "Every man should eat and indeed drink and see good for all his hard work. It is the gift of God." (Ecclesiastes 3:13) The Bible recommends enjoying the fruit of one's hard work. This gives us a hint as to what may be the proper view of hard work.

The Health and Welfare Ministry of Japan recently advised workers to "forget about the job after hours (and) eat dinner with their families." Some business leaders apparently appreciate the wisdom of this advice. For ex-



Your work should not endanger family relationships

ample, the president of a growing biotechnology firm declared: "I want all our employees to take good care of their families before anything else. Their work at our company is nothing more than a means to an end."

Indeed, a good family relationship is certainly a worthwhile goal to work hard for. If a warm family atmosphere is endangered or your health suffers because of your work, you are not seeing good for all your hard work.

However, in Japanese society, where the seniority system dominates, some have developed the attitude: "Neither be absent, nor be tardy, nor work." They pretend to be diligent by staying late at the workplace but only wait

Balanced View of Work Saves a Marriage

For Yasuo, who lives in Hokkaido, Japan, work was the only pastime until a few years ago. He held a position in middle management, and he was obsessed with increasing sales. Day after day he worked till as late as 11:00 p.m. without taking any holidays. Then, he recalls: "I realized that no matter how hard I exerted myself, I was not

getting any joy out of my work." Yasuo's physical condition began to deteriorate. Talking with his wife, he realized that there was something more important than his work —his family. He changed his life-style and joined his wife in studying the Bible. He is now the loved and respected head of a happy family.

for the supervisor to go home. Kenji, a salesman for an interior decorating company in Hiroshima, had that mentality. He would loaf on the job, spending time in a café or a pinball parlor.

Does such an attitude result in happiness? "The slack hand will come to be for forced labor," says a Bible proverb. Today, one may not come under literal forced labor because of one's laziness. Nevertheless, the work could become drudgery, forced labor mentally speaking. On the other hand, the same proverb points out the benefit of diligence: "The hand of the diligent ones is the one that will rule." (Proverbs 12:24) Even if you do

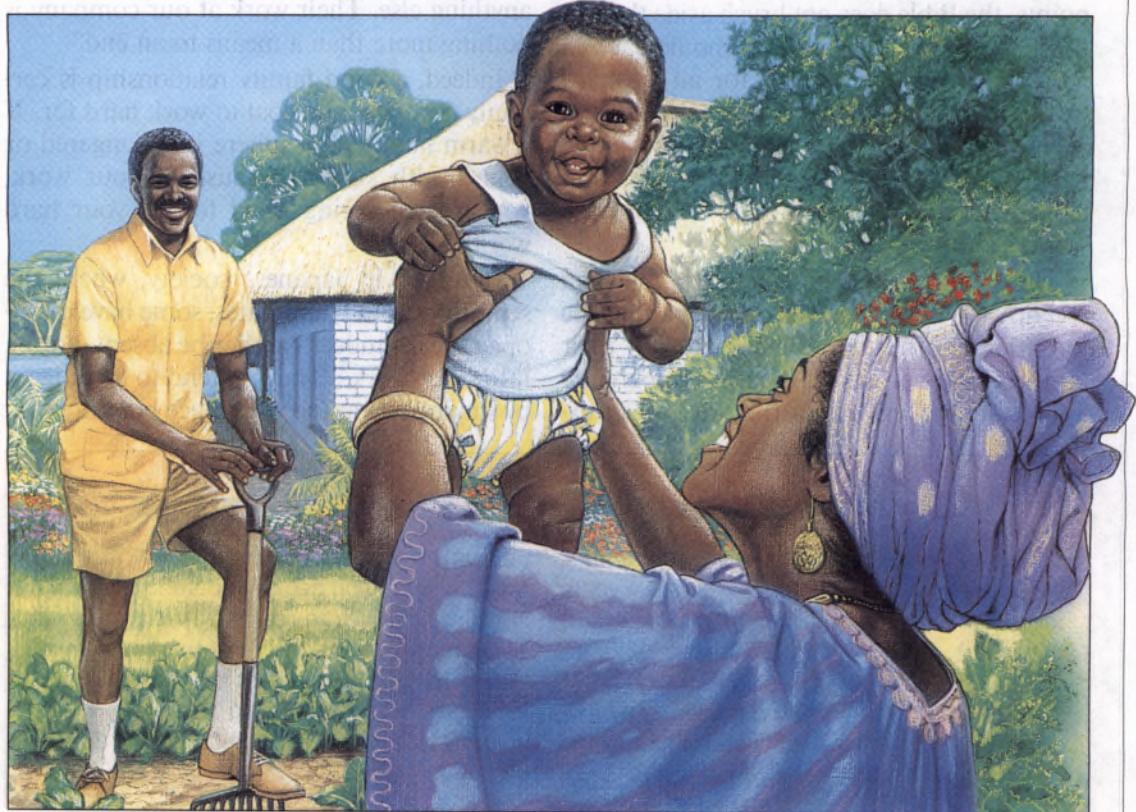
not come to rule a country or a company, at least you will be respected by your family and will be master of yourself. In addition you may win the confidence of your employer, as well as gain a clean conscience.

Kenji found this to be so. He decided to study the Bible, and his life changed dramatically. "By applying the principle of honesty in the workplace," he says, "I began to work conscientiously whether the boss was present or not. That won his trust in me."

When Working Hard Becomes a Virtue

The truth is, for work to be meaningful, it must benefit others. 'Satisfying work,' de-

Soon all will enjoy working to make earth a paradise



fined a business writer, 'is work that brings convenience, comfort or pleasure to many people's lives.' Such work brings deep satisfaction to the worker. It is as Jesus Christ said: "There is more happiness in giving than there is in receiving."—Acts 20:35.

Although working for the good of others is commendable, there is yet another key element to finding satisfaction in work and in life. King Solomon, after having experienced all the luxuries and riches that life has to offer, came to this grand conclusion: "Fear the true God and keep his commandments. For this is the whole obligation of man."—Ecclesiastes 12:13.

Clearly, we must consider God's will in whatever we undertake. Are we working in harmony with his will or working against it? Are we endeavoring to please him or just to please ourselves? If we neglect doing God's will, we become nothing more than materialists or hedonists and will eventually suffer the pain of loneliness, emptiness, and despair.

So remember that serving Jehovah God—doing work that pleases our Creator—will never leave us dissatisfied. Jehovah himself is a hard worker, and he invites us to join him and become his "fellow workers." (1 Corinthians 3:9; John 5:17) But does such hard work really bring genuine happiness?

A managing director of a printing firm once visited the Watch Tower printing plant in Japan to study its layout. His attention was drawn to more than the machines. He saw young men enjoying their work, and he was surprised to hear that all are volunteers and that countless more have eagerly applied to join them. Why was he surprised? "At our company," he explained, "when we employ ten people, we must consider it fairly good if four of them are still with us after one year.

You Watchtower people have a treasure in these young workers!"

What makes these young men so happy and such hard workers? As volunteers, they are obviously not working for money. What, then, motivates them? Their dedication to and appreciation for Jehovah, their Creator, and their love for their neighbor. Their attitude shows that they are not working "as men pleasers, but as Christ's slaves, doing the will of God whole-souled."—Ephesians 6:6.

All of this is but a preview of what is to come. Those who are now working hard to serve Jehovah can look forward to the time when he will soon restore Paradise and the whole earth will be filled with worthwhile works. Isaiah, an ancient prophet of God, foretold regarding life then: "They will certainly build houses and have occupancy; and they will certainly plant vineyards and eat their fruitage. They will not build and someone else have occupancy; they will not plant and someone else do the eating. . . . The work of their own hands my chosen ones will use to the full."—Isaiah 65:21, 22.

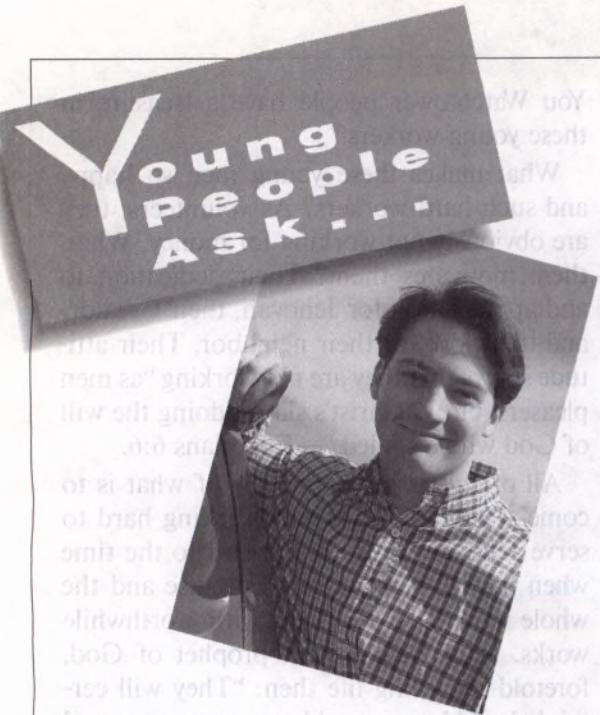
What a blessing work will then be! By learning what God's will is for you and working in harmony with it, may you be among the blessed ones of Jehovah and always 'see good for all your hard work.'—Ecclesiastes 3:13.

In Our Next Issue

**Divorce—The Door
to a Happier Life?**

**Bicycle Racing
—Its Ups and Downs**

A Look at Eyeglasses



What About Hanging Out?

VIDEO arcades, fast-food restaurants, street corners, local convenience stores—in both rich and poor neighborhoods—have become the gathering places where young people hang out.

Shopping malls are particularly popular hangouts in the United States. There groups of youths can often be seen roaming about for hours at a time. "Malls will always be the place to go," claims one teenage girl, "because there's so much going on, and there's always something to catch your attention—like the boys!"

No mall nearby? Then an empty lot or a street corner will suffice. Says 15-year-old Tari: "My friends and I drive out to some big parking lots in a nearby park, sit on the hoods

of our cars and talk for hours."—*'Teen* magazine, September 1990.

Of course, there's nothing really new about hanging out. The Bible tells of people in early times who would gather in public places and "spend their leisure time at nothing but telling something or listening to something new." (Acts 17:21) But why is this pastime so popular among youths today?

According to the book *The Adolescent*, by F. Philip Rice, adolescents "become increasingly aware of their needs to belong to a group. They want to be liked by their peers." Thus, hanging out with friends seems to fill a need for companionship and support.

Other youths see it as simply a way to fight boredom. Explains young Michelle: "It's boring to sit at home at night. You want to go out and have fun because if you don't you're going to have a boring evening." Sixteen-year-old Ed claims that hanging out is "something to do and it kind of keeps you out of trouble." But does it really do so?

When People Hang Out

The Bible does not condemn having a good time with friends. Nevertheless, it warns: "He that is walking with wise persons will become wise, but he that is having dealings with the stupid ones will fare badly." (Proverbs 13:20) Now, how many of the youths idly standing on street corners can be said to be wise persons—those having a real respect for Bible principles? They may not necessarily be troublemakers, but a large group of bored, unsupervised youths plus a lot of idle time can easily add up to trouble.

For this reason the Bible puts hanging out in a bad light. Consider the time the apostle Paul and Silas visited the city of Thessalonica. Opposers to the Christian message "took into their company certain wicked men of the marketplace idlers [worthless loafers," To-

*day's English Version] and formed a mob and proceeded to throw the city into an uproar." (Acts 17:5) According to *Vine's Expository Dictionary of Old and New Testament Words*, these marketplace idlers were individuals "frequenting markets, and so sauntering about idly." Sound familiar? At any rate, these idlers likely had little or no interest in Paul's message, but having nothing better to do, they could easily be seduced into rioting.*

Mischief and Mayhem

Think, now, of the potential for trouble when a group of idle youths get together. Not that anyone plans mayhem. "There's not much going on," claims a 16-year-old named Ken who hangs out at a school parking lot. "We sit on our cars and tell stupid jokes or just talk about dates." Yes, for a while, rambling talk about sports, music, and the opposite sex may keep everyone entertained. All too often, though, youths quickly tire of just talking.

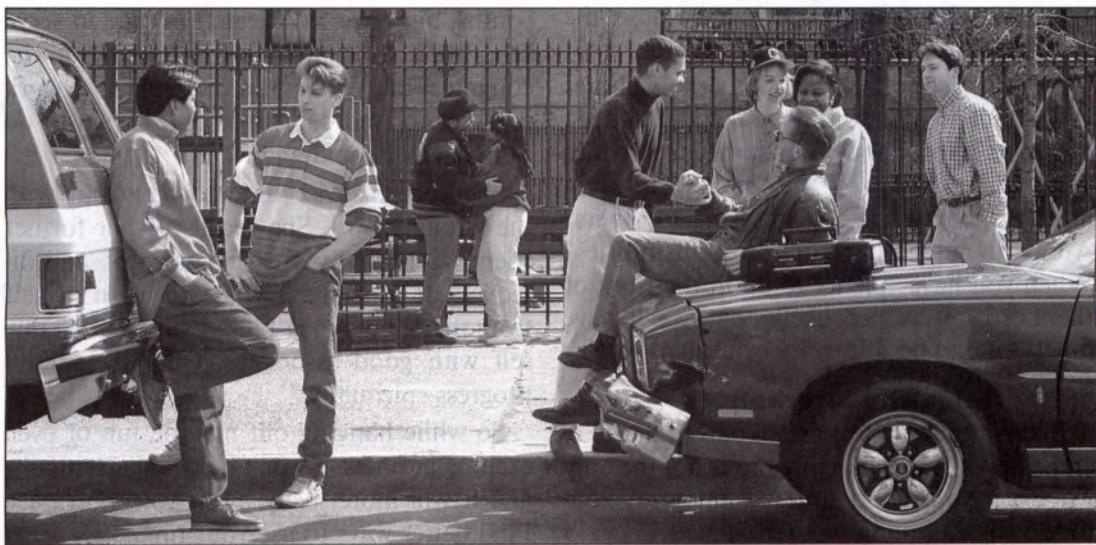
Researchers Mihaly Csikszentmihalyi and Reed Larson report: "Again and again,

[youths] described these occasions [of hanging out] in terms of 'being rowdy,' being loud, crazy, and wild. . . . There is something about the group interaction of peers that makes rowdiness happen, *even if the individual teenagers involved are not inclined to it.* . . . Rowdy activities included driving around yelling, throwing cans on people's yards, and having fights." (Italics ours.)—*Being Adolescent*.

True, you may not be inclined to do something crazy just because your friends do. But you could put yourself under enormous pressure to do wrong if you were in the midst of wrongdoers. (1 Corinthians 15:33) And even if you refrain from joining in the rowdiness, your presence there could give others the wrong impression about you. This is what occurred with a young girl named Dinah, daughter of the Hebrew patriarch Jacob.

Dinah was raised to be a worshiper of Jehovah God, although her family lived in the land of Canaan—a land ridden with sexual perversion and idolatry. Her father, Jacob, therefore tried hard to limit contact with the immoral Canaanites by pitching his camp

Is hanging out the best use of your time?



outside the city of Shechem and establishing a separate water supply. (Genesis 33:18; John 4:12) Yet, Dinah "used to go out to see the daughters of the land," perhaps regularly. (Genesis 34:1) Dinah may have viewed hanging out with the Canaanites as harmless fun. But Canaanite women had a reputation for being promiscuous. So when a Canaanite man named Shechem observed Dinah in company with such women, he "took her and lay down with her and violated her."—Genesis 34:2.

In a similar way, hanging out with the wrong crowd can get you in real trouble. A young man named Leonard recalls that in spite of the fact that he was raised as a Christian, he began "hanging around with a rebellious crowd. We'd run around and drink beer together—even though I was not of legal age. By age 18, I was smoking marijuana."

The Best Use of Time

One study found that 44 percent of the youths polled spent three to five hours or more each time they visited a shopping mall; 14 percent spent six hours. But rather than waste time in idle behavior, a wise youth 'buys out the opportune time because the days are wicked.'—Ephesians 5:15, 16.

Do your schoolwork and household chores suffer because of the time you spend at teen hangouts? How about your spiritual activities—personal study of the Bible, Christian meetings, the work of witnessing to others? Are you neglecting such responsibilities? When you have "plenty to do in the work of the Lord," it is not likely that you'll have much time to be idle.—1 Corinthians 15:58.

Healthy Alternatives

Recreation is an important part of life. (Ecclesiastes 3:4) But hanging out is not the only way to have a good time. "I enjoy my solitude," says a young woman named Lucy. "I

like reading, and this has helped me develop an interest in foreign history, culture, and language. I visit museums and galleries, sew and cook. I also enjoy drawing and letter writing, and I even try a little poetry once in a while." No, being alone does not have to be boring.

Your family may be another source of wholesome recreation. Now, before you reject this idea, listen to a young man named Jack. He recalls: "My parents always had something planned for us to do. We went ice-skating and roller-skating; we went to parks, zoos, and museums. Even cleaning the yard or the house was fun when we did it as a family." Perhaps your family has fallen out of the habit of doing things together. If so, why don't you come up with some ideas for a family outing? You may enjoy it more than you expected!

This does not mean you cannot enjoy the association of peers—including times when you simply engage in light conversation or just relax together. But be selective in your choice of friends. Says a young man named Enrique: "I used to hang out with worldly youths, but once I dedicated my life to serve Jehovah, I associated with young ones in the congregation. We went in the preaching work together, played ball together—I tried to do as much as I could with them."

Shelleace likewise used to hang out with the wrong crowd. She recalls of her former friends: "Their lives lacked purpose and direction. It took me a while to wean myself from them, but when I did, I surrounded myself with good associates. Only then did I progress spiritually."

So while hanging out may be fun or even exciting at times, it won't help you spiritually, and it will more likely harm you. Be smart. Find better ways to use your time.

Joshua's Wish

ON MARCH 6, 1992, the Wood family learned that their youngest member, seven-year-old Joshua, had an acute form of leukemia, a life-threatening disease. Joshua's oldest brother, age 16, and his sister, age 19, are full-time ministers (pioneers) of Jehovah's Witnesses, as is his father. Joshua's other brother is ten.

To treat Joshua's disease, aggressive chemotherapy was immediately begun. One side effect was loss of appetite, so it was a constant struggle to get Joshua to eat. In July the entire family decided to attend together the district convention of Jehovah's Witnesses in Lafayette, Louisiana, U.S.A., which is not far from their home in Winnfield. While he was there, Joshua's condition deteriorated, and on Saturday morning he was taken to a hospital emergency room. After the convention his parents took him to the hospital in New Orleans, where he regularly receives treatment.

While the family was in New Orleans, a social worker told Joshua's mother, April, about a program that fulfills the wishes of seriously ill children. An application for the program was left with April, and she and her husband, Paul, filled it out. When Joshua was brought back to New Orleans at the end of August for his regular monthly check-up, Jim, a man who represents the program, came by to talk with Joshua about his wish.

"I want to go to New York," Joshua said.

Since children often wish to go to some type of amusement park, Jim wondered why Joshua wanted to go to New York. "I want to see the Watchtower Society," Joshua replied.

"What is that?" Jim asked.

"You know, that's where they make the magazines, Bibles, books, and tracts."

April explained further to Jim about the headquarters of Jehovah's Witnesses and the publishing work that goes on there. "My brother is visiting there right now," Joshua said, "and I would like to go with my whole family."

After learning that there were six in the family, Jim asked Joshua whether he might not instead like to go to Disney World in Florida.



Joshua was sure about wanting to go to New York. Jim explained that he didn't know whether the request could be fulfilled but that he would check into it. Jim asked Joshua for his second choice.

"An IBM computer," Joshua replied.

"Why IBM?" Jim wanted to know.

Joshua said it was so that he could get the Bible on diskette from the Watch Tower Society. (Joshua knew that the Bible diskette is for IBM-compatible computers.) Jim then asked again: "Are you sure you don't want to go to Disney World?"

"I'm sure," Joshua said.

A few days later, Jim came back to tell Joshua that his wish to go to New York with his family had been granted. "Josh is the type of child who stays pretty calm about things that excite most people," his mother explained, "but I was ecstatic!"

Where Joshua and his family visited

Right: Watchtower Educational Center

Below: Watchtower office complex



On September 30 the Wood family flew from New Orleans to New York City. None had previously visited the Watchtower facilities except Buddy, the oldest boy, who had been there only a few weeks before. All six were accommodated at the Ramada Inn motel in Manhattan, New York, and were provided limousine service to the Witnesses' shipping, printing, office, and residence complexes across the East River in Brooklyn.

During two days they were there, the family received guided tours of the headquarters facilities. One day they toured the office buildings and the five-building factory complex. On the next day, they visited the million-square-foot building that houses shipping, tape duplicating, and other operations, as well as toured some of the 21 residence buildings that accommodate the more than three thousand volunteers. During the family's stay, special arrangements were

made for them to enjoy three meals with the headquarters staff, to eat in one of the ten dining rooms.

On October 3 the family rented a car and drove about a hundred miles north to visit Watchtower Farms. They toured the large printing complex there and also saw where much of the food for the headquarters staff is grown. In the afternoon, the family visited the still-under-construction Watchtower Educational Center, located near Patterson, New York, about an hour's drive from Watchtower Farms, and then made it back to New York after nightfall.

The following day a limousine took them to New York's Kennedy Airport for their return flight to New Orleans. Joshua's wish to see "where they make the magazines, Bibles, books, and tracts" had been fulfilled. The Wood family is deeply grateful to the wish pro-

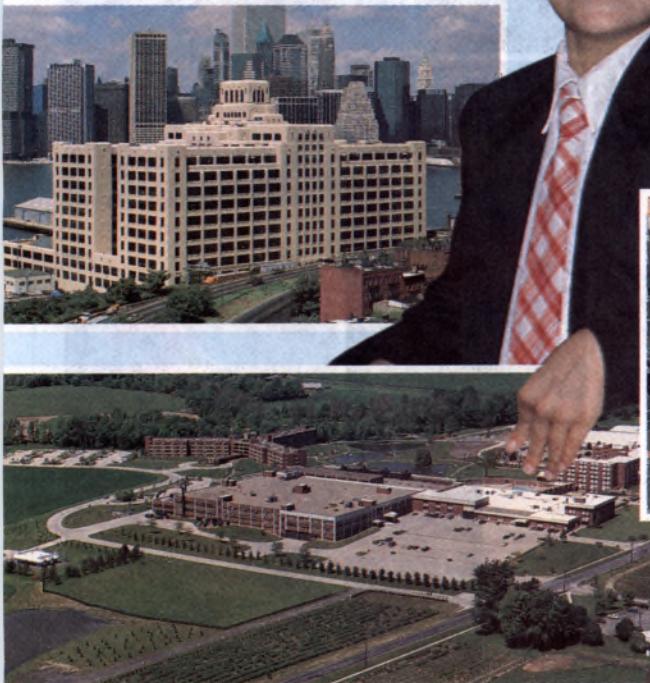
gram for their all-expense-paid, spiritually strengthening trip.

A few weeks later, in mid-November, while at the hospital in New Orleans for his monthly treatment, Joshua was invited to be a guest of the popular country-and-western singer Garth Brooks at one of his performances in Monroe, Louisiana. Afterward, when Joshua and his father were invited backstage by Mr. Brooks, Joshua presented him with a copy of the Bible study aid *You Can Live Forever in Paradise on Earth*. When Joshua asked Mr. Brooks how his child was doing (he has a young daughter), he was visibly moved by Joshua's interest.

Surely it is refreshing when a child is concerned about the interests of others, especially when his choices reflect an interest in spiritual things! If you could receive a wish, would you choose that which would benefit yourself and others spiritually?

Left: 360 Furman building, which houses Shipping Department

Below: Factory complex



Left: Watchtower Farms and printing complex

Birdsong

Just Another Pretty Tune?

THE distant spotlight begins to cast its light on the members of the chorus as they take their places, dressed neatly for the performance. Trained from infancy in the family tradition, each one sings out with ease. A few among them even appear skilled in the art of improvisation, spontaneously creating new and different tunes.

Where is the performance held? It is not in any world-famous concert hall. Rather, the curtain of the night's darkness rises to reveal a vast array of little feathered creatures. Songbirds of many kinds, on trees, fences, and telephone wires, blend their voices in one of the most delightful choruses in the world. Their trills, grace notes, whistles, and flutelike tones sound a joyous greeting to a new day.

But these are not just pleasant sounds. There is much more to these birdsongs than meets the ear. Why do birds sing? Do the songs have meaning? How do the birds learn their songs? Do they ever learn new ones?



The Hidden Messages

The liveliest serenading occurs in the mornings and evenings. You will likely hear mostly male voices in the chorus. Their message is twofold. To other males it is a stern warning not to cross territorial bounds. To the females it is an invitation from the eligible bachelors. Songbirds develop their own regional songs, similar to the different accents with which a language may be spoken. The distinctive dialect of the mating song will attract females only from the singer's particular locale. The most vigorous and complicated singing can be heard during breeding season—a show to impress the ladies.

With his tune, the singer tells his whereabouts to friend and foe alike. Therefore, colorful birds and those preferring open spaces wisely avoid boisterous singing that might attract unwelcome attention. On the other hand, well-camouflaged birds and those dwelling in thickly forested areas can sing loudly, to their hearts' delight, with little danger of being spotted.

At times what you hear may not be the true song of our winged friends but simply a brief call note that establishes contact between mates or keeps a flock together. It could be an alarm call signaling imminent danger, or it may be a call to arms, to mob a cat or other intruder. With their voices, birds communicate their mood—whether angry, frightened, or agitated—as well as their mating status.

Skillful and Talented Musicians

The vocal abilities of songbirds are truly remarkable. Some can sing three or four notes at once. Others can produce up to 80 notes per second. To the human ear, these sound like one continuous note, but birds can distinguish them because of their keen sense of hearing.

A Familiar Ring

A scientist in Britain noted a familiar ring to one of the songs of several song thrushes. He recorded the song and analyzed it electronically. To his surprise, it was very similar to the electronic chirp of the trimphone, distributed by Telecom, Britain's phone company. Apparently, the songbirds heard the tune, picked it up, and added it to their repertoire. The serenading thrushes may well have sent some unsuspecting Britishers dashing to the phone.

Researchers have wondered whether birds have an ear for music. Can birds tell the difference between an organ piece by Bach and Stravinsky's "Rite of Spring"? The investigators trained four pigeons to peck one of two disks to identify the correct composer and receive a food reward. Before long the pigeons could hear any segment of the 20-minute piece by Bach and select the proper disk. With minor exceptions, they could make the right choice even with music of similar style by other composers.

Certain tropical birds are able to compose and perform duets. It seems that a mated pair will hold rehearsals, experimenting until they create an original composition consisting of phrases that they sing in an alternating, or call-and-answer, fashion. They sing with such precision that to an untrained ear, it sounds like one continuous song sung by a single bird. Each partner can sing either part or do the whole song solo in the absence of its mate. This unique ability apparently helps birds in dense rain forests to locate and identify their own mates.

Composers and Copycats

Just how birds learn and invent their songs is a subject still under investigation, but one thing is sure: Their learning methods are many and varied. Here is a sampling of the variety found in the bird world.

The male chaffinch has his song at least partially fixed in his brain by the time of birth. Even if raised completely isolated from other birds, his song, though abnormal, will still have the same number of notes and be about the same length as the standard song. To develop the pattern correctly, however, he must hear the song of other male chaffinches before he is old enough to sing, and he must hear it again the next spring. Then, like a human professional singer, this feathered virtuoso must perfect his song with practice, practice, practice—trying again and again to match his youthful voice with the tune he has in his head.

The Oregon junco will make up its own songs if it does not hear the native song. But once it hears the plain and simple junco song, it will stop inventing and will sound just like all the others. On the other hand, the Arizona junco will have its creativity stimulated by hearing an adult junco. It will not copy what it hears but is prompted to invent its own unique song.

The strongest evidence that some songs are genetically fixed is provided by "brood parasites." For example, the cuckoo lays its eggs in the nests of other types of birds, which act as foster parents. When it hatches, how does the baby cuckoo know that it isn't the same as its foster father and shouldn't sing like him? The cuckoo song must be firmly implanted in its brain by the time of birth.

So in many cases, birdsong is evidently a matter of genetics. Even if a bird never learns its own native song, it will not simply copy

and adopt the song of another kind. Some researchers suggest that a fuzzy pattern of the native song is present in the brain and the bird can scrutinize what it hears and copy the sound that most closely resembles the pattern.

And what brains they have! Scientist Fernando Nottebohm made the startling discovery that the brains of songbirds are lateralized, that is, they are organized according to left and right sides, each with its own particular functions. He also isolated the song-learning capacity to a special area of the bird's brain. In the developing male canary, this segment actually grows and shrinks depending upon its need to learn new tunes for the coming mating season. Canaries attempt to sing early in life, but even these masters of song do not achieve professional status till eight or nine months of age.

Other songbirds specialize in creating variations on a theme, borrowing an existing song and elaborating on it or changing the order of its notes or movements. Such mimic birds have long been the objects of our fascination, especially those birds that use their abilities to "talk," or imitate human voices. The copycat singers of the bird world include the lyrebird of Australia, the marsh warbler and starling of Europe, and the yellow-breasted chat and mockingbird of North America. The latter may have dozens of songs in his repertoire, even including an imitation of a frog or a cricket. It is intriguing, indeed, to listen to the mockingbird's happy medley of excerpts from well-known classics of birddom.

When these winged creatures sing their pretty tunes, not only can you hear but with appreciation you can also *listen*. Tomorrow's performance will begin bright and early. Will you enjoy it?



Meeting the Challenges of the 21st Century

NINE, eight, seven, and counting! Countdown for a rocket launch? No, rather the countdown for the number of years that are still remaining before humanity is thrust into the uncertainties of the 21st century.*

Based on the scientific achievements of the past century, many may sincerely believe that science can cope with any challenge the 21st century might bring.* They may feel as did a French author at the turn of the 20th century. "Science is today destined to rule the world," he wrote. "From now on world rulership belongs, not to the deity, but to science, to science as the peoples' benefactor and mankind's liberator."

For science to live up to these expectations, it would have to undo many of the problems it has helped create.

The environmental devastation for which science is responsible is tremendous. The book *5000 Days to Save the Planet* asserts: "If we keep on our current course of environmental exploitation, the question is not will modern society survive the next century, but will it disappear with a bang or a whimper?"

* Technically speaking, the 21st century will begin on January 1, 2001. Popular usage, however, views the 1st century as being from the year 1 through 99 (there was no year 0); the 2nd century, from the year 100 through 199; and accordingly, the 21st century, from the year 2000 through 2099.

* This is the last in *Awake!* magazine's six-part series on science.

Such challenges will do much to keep the search for truth alive. The search for truth is not always an easy task. It requires a spirit of humility, a desire to learn, and a willingness to admit mistakes. It requires a spirit of wonder, a desire to explore, and a sense of awe. It requires a spirit of inquiry, a desire to understand, and a sense of discovery. It requires a spirit of compassion, a desire to help others, and a sense of responsibility. It requires a spirit of dedication, a desire to serve, and a sense of purpose. It requires a spirit of faith, a desire to trust in God, and a sense of hope. It requires a spirit of love, a desire to care for others, and a sense of compassion. It requires a spirit of sacrifice, a desire to give, and a sense of selflessness. It requires a spirit of courage, a desire to stand up for what is right, and a sense of conviction. It requires a spirit of wisdom, a desire to know, and a sense of discernment. It requires a spirit of truth, a desire to seek it, and a sense of integrity. It requires a spirit of justice, a desire to do what is right, and a sense of fairness. It requires a spirit of equality, a desire to treat everyone with respect, and a sense of fairness. It requires a spirit of freedom, a desire to be free, and a sense of independence. It requires a spirit of democracy, a desire to participate in the political process, and a sense of responsibility. It requires a spirit of patriotism, a desire to love one's country, and a sense of pride. It requires a spirit of internationalism, a desire to work with others, and a sense of global perspective. It requires a spirit of environmentalism, a desire to protect the planet, and a sense of responsibility. It requires a spirit of spirituality, a desire to connect with the divine, and a sense of reverence. It requires a spirit of personal growth, a desire to improve oneself, and a sense of self-improvement. It requires a spirit of social justice, a desire to fight for the rights of the弱者 (the weak), and a sense of compassion. It requires a spirit of peace, a desire to live in harmony with others, and a sense of tranquility. It requires a spirit of love, a desire to love all, and a sense of compassion. It requires a spirit of truth, a desire to seek it, and a sense of integrity. It requires a spirit of justice, a desire to do what is right, and a sense of fairness. It requires a spirit of equality, a desire to treat everyone with respect, and a sense of fairness. It requires a spirit of freedom, a desire to be free, and a sense of independence. It requires a spirit of democracy, a desire to participate in the political process, and a sense of responsibility. It requires a spirit of patriotism, a desire to love one's country, and a sense of pride. It requires a spirit of internationalism, a desire to work with others, and a sense of global perspective. It requires a spirit of environmentalism, a desire to protect the planet, and a sense of responsibility. It requires a spirit of spirituality, a desire to connect with the divine, and a sense of reverence. It requires a spirit of personal growth, a desire to improve oneself, and a sense of self-improvement. It requires a spirit of social justice, a desire to fight for the rights of the弱者 (the weak), and a sense of compassion. It requires a spirit of peace, a desire to live in harmony with others, and a sense of tranquility.

This hardly seems like an acceptable choice.

The Limitations of Science

"Many scientists of the 19th century . . . often felt that they would someday achieve absolute truth and ultimate understanding," says the book *The Scientist*. "Their successors," the book continues, "speak only of reaching 'partial understanding', of continually approaching truth but never grasping it completely." This lack of absolute knowledge seriously limits what science can do.

Scientific facts have never changed over the years, whereas scientific theories have—and this repeatedly. In fact, at times theories have lurched from one extreme to the other. Medical scientists once thought, for example, that withdrawing blood from the body of a seriously ill person was the scientific thing to do. Later they thought that infusing blood was the answer. Now some are beginning to recognize the wisdom of not doing either and of searching for less dangerous alternative treatments.

Obviously, what scientists know is far less than what they do not know. *The World Book Encyclopedia* notes: "Botanists still do not know exactly how the process of photosynthesis works. Biologists and biochemists have not yet found the answer to the question of

how life originated. Astronomers have not yet developed a satisfactory explanation of the origin of the universe. Medical scientists and physiologists do not know the cause or cure of cancer or how to cure the various virus diseases. . . . Psychologists do not know all the causes of mental illness."

Science is also limited in the sense that it can be no better than the people who pursue it. In other words, a scientist's lack of knowledge is compounded by his imperfection. The authors of *5000 Days to Save the Planet* discovered that "time and again . . . special-purpose organizations have manipulated research, distorted cost-benefit analyses and suppressed information in order to sell harmful products or to continue activities which are detrimental to the environment."

Even if the majority of scientists are honest, this is still no reason to place them or their activity upon a pedestal. "They are just like everybody else," argues British-born Edward Bowen, himself a scientist. "They all have their failings. Some are dedicated, some unscrupulous, some sharp as a whip, others dull as dishwater. I've known some of the great names of science, men who have done tremendous good for the world. And while I've known no scientist who's been in jail, I've known some who richly deserved to be."

Clearly, because of its many limitations, modern-day science is not up to meeting the challenges of the 21st century. Especially has it failed to protect the environment, and rather than help rid the earth of war, it has helped create weapons of mass destruction.

Urgent Action Needed

Everyone agrees that something must be done soon. Last November a group of 1,575 scientists, including 99 Nobel prize winners, issued a statement entitled "World Scientists' Warning to Humanity" in which they wrote:

"No more than one or a few decades remain before the chance to avert the threats we now confront will be lost and the prospects for humanity immeasurably diminished." They asserted: "Human beings and the natural world are on a collision course."

Similar warnings have been sounded before. In fact, in 1952, Bertrand Russell, a 20th-century British philosopher and himself an advocate of science, said: "If human life is to continue in spite of science, mankind will have to learn a discipline of the passions which, in the past, has not been necessary. Men will have to submit to the law, even when they think the law unjust and iniquitous. . . . If it does not happen the human race will perish, and will perish as a result of science. A clear choice must be made within fifty years, the choice between Reason and Death. And by 'Reason' I mean willingness to submit to law as declared by an international authority. I fear that mankind may choose Death. I hope I am mistaken."

The truth is, people willing to abide by righteous standards are nowadays in short supply. The late civil rights leader Martin Luther King correctly noted: "Our scientific power has outrun our spiritual power. We have guided missiles and misguided men." Yet, Russell actually hit upon the solution to the world's problems when he said that mankind will have "to submit to law as declared by an international authority."

Who Can Solve the Problem?

True, Bertrand Russell was not referring to a divine authority when he spoke of law as declared by an international authority. Yet, obedience to the laws of such an authority is exactly what is needed. Human laws and human authorities are definitely not the answer. They could never change the world and thus prevent disaster. The dismal record of history

proves that humans need divine rulership.*

Indeed, only Almighty God, whose name is Jehovah, can provide an international authority with the power and ability to meet the challenges of the 21st century. (Psalm 83:18) The authority that all must submit to if they would receive life is God's Kingdom, which is a heavenly world government established by the Creator, Jehovah God.

Long ago the Bible foretold regarding this government: "For unto us a child is born, unto us a son is given: and the government shall be upon his shoulder: and his name shall be called . . . Prince of Peace. Of the increase of his government and peace there shall be no end." (Isaiah 9:6, 7, *King James Version*) This foretold child, Jesus Christ, was miraculously conceived by the virgin Mary and was born in Bethlehem of Judea.—Luke 1:30-33.

While on earth Jesus taught his followers to pray about God's government when he said: "You must pray, then, this way: . . . 'Let your kingdom come. Let your will take place, as in heaven, also upon earth.'" (Matthew 6:9, 10) Only Jehovah God's powerful holy spirit, or active force, can help willing people to make the necessary changes in their lives in harmony with the righteous laws of his government.

* The ineffectiveness of human governments was highlighted in a ten-part *Awake!* series (August 8 to December 22, 1990) entitled "Human Rule Weighed in the Balances."

In the Midst of Bad News, Good News

Despite scientific progress multitudes of starving children and emaciated adults are still to be found. But soon under God's Messianic Kingdom, "there will come to be plenty of grain on the earth; on the top of the mountains there will be an overflow."—Psalm 72:16.

Despite scientific progress oppression and violence are still the lot of millions. But soon the King of God's Messianic Kingdom "will deliver the poor one crying for help, also the afflicted one and whoever has no helper. . . . From oppression and from violence he will redeem their soul."—Psalm 72:12-14.

Despite scientific progress the number of street people, bereft of housing and sufficient food, continues to grow worldwide. But soon under God's Messianic Kingdom, people "will certainly build houses and have occupancy . . . They will not build and someone else have occupancy; they will not plant and someone else do the eating."—Isaiah 65:21, 22.

Despite medical progress preventable diseases continue to kill millions. But soon under God's Messianic Kingdom, "no resident will say: 'I am sick.'"—Isaiah 33:24.

Science cannot. Thousands of years of discord and confusion are proof that it cannot.

Jehovah God, who is unlimited in accurate scientific knowledge, will see to it that the earth enjoys Paradise conditions, even as they existed in the garden of Eden, when he created the first human pair. At that time he instructed them: "Be fruitful and become many and fill the earth and subdue it." (Genesis 1:28) Although they failed to be obedient and did not carry out that assignment, Jehovah God will see to it that his original purpose for this earth to be a paradise is fulfilled. "I have even spoken it; I shall also bring it in," he says.

(Isaiah 46:11) But when will God's original purpose for the earth be fulfilled?

Jesus Christ and his apostles described conditions that would exist on earth in "the last days," immediately before God's Kingdom replaces all human governments. (2 Timothy 3:1-5; Matthew 24:3-14, 37-39; 2 Peter 3:3, 4) When one reads the Bible prophecies cited here and compares them with world events, it becomes clear that we are living at the time when God's Kingdom will take the action described in the Bible at Daniel 2:44: "In the days of those kings [the human governments now ruling] the God of heaven will set up a kingdom that will never be brought to ruin. And the kingdom itself will not be passed on to any other people. It will crush and put an end to all these kingdoms, and it itself will stand to times indefinite."

Life in the Near Future

Just imagine what that will mean for the near future! What marvelous things are in store for humankind during the coming century, if not even before! The bad effects of thousands of years of imperfect human rule, hypocritical religion, greedy commerce, and this world's science will be replaced by divine

rule, which will bless humans beyond their greatest expectations.

This is how the Bible describes events that are certain to transpire in God's righteous new world: "Look! The tent of God is with mankind, and he 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.

Therefore, of primary importance to you is to be aware of the countdown that will end shortly at the destruction of this world system that is under the control of the powerful, invisible world ruler, Satan the Devil. (John 12:31; 2 Corinthians 4:3, 4) It is vital that you learn God's will and do it, for the Bible promises: "The world is passing away and so is its desire, but he that does the will of God remains forever."—1 John 2:17.

So, then, as long as time allows, may you wisely take advantage of Jehovah's provisions for survival. Then you will be privileged to enjoy life in the future, yes, during the

upcoming 21st century
—as well as during
the 22nd, 23rd, and
countless others
thereafter.



Courtesy Hartebeespoortdam Snake and Animal Park

Everywhere on earth life will become a delight

Japanese Gardens

Nature in Miniature

By Awake! correspondent in Japan



LOOKING out of your window, you see the ocean, rimmed by white sands and dark green pines. Standing on your porch, you view majestic mountains complete with cascading waterfalls. As far as you can see, everything is within the bounds of your property. An unattainable dream for ordinary people? No, not if you have a Japanese garden. Duplicating nature in miniature realizes this seemingly impossible dream.

To give the effect of natural grandeur, rocks, water, plants, and sometimes sand are used. A little imagination, of course, is needed, but when the proportions are right, won-

derful illusions are created. A pond represents the ocean or a lake, and the stepping-stones, islands. Large rocks become mountains, and the water flowing between rocks, waterfalls.

Trees Used in a Japanese Garden

Since green predominates in Japan's natural scenery, trees rather than flowers dominate in the garden. Trees are not casually placed and allowed to grow wildly. Their spacing is calculated, and their growth controlled. Indeed, trees have an important role. They create a serenity that is characteristic of Japanese gardens.



Cherry trees add color in springtime

Graceful clumps of bamboos augment the Oriental atmosphere. Cypress and cedars are layered and rounded, giving substance to the perimeter of the garden. The Japanese holly (*inu-tsuge*) is an all-around favorite, as so much can be done with it. You may find holly cut to look like a wedding cake, a turtle, or a crane standing on one leg. Of all the trees used in the garden, though, the stately pines head the cast.

Shaping and Caring for Trees

Colored species of trees are used but sparingly. They add varying accents to the garden from season to season. Plum, cherry, and magnolia are used for color in early spring. In April and May, vivid azalea blossoms give a festive touch to the otherwise tranquil atmosphere. They are usually trimmed into round, smooth balls, large and small. In autumn the leaves of the Japanese maple splash their flaming red touches. Nevertheless, green predominates in a Japanese garden.

Among the varieties of Japanese pines, the black and the red are the most commonly used for shaping. The black is called the "male" of the species and the red the "female" because of their respectively tough and gentle traits. Of the two, the sturdier constitution of the black pine makes it easier to nurture and train. Let us take the pines as an example and see how the trees in a Japanese garden are shaped and cared for.

Trees are shaped into various figures



A gardener will start his work on saplings. Examining how they are inclined to grow, he carefully coaxes the young trees into a number of popular styles. He may encourage a slanted pose that when placed over an outer gate makes a lovely welcoming pine arch. Or he may try a scheme of having the branches slope downward in a cascading effect. A formal upright stance could also be employed. How does the gardener create the desired shape and proportion?

He may plant his sapling at an angle and use bamboo poles as crutches. He attaches frames or braces and lateral bamboo poles to the tree by using rot-resistant black string made of palm bark. "The string," explains a fourth-generation gardener, "is replaced periodically so as not to leave unsightly marks on the branches." The poles are kept in place for a year or two until the new shape will hold without them.

Then comes the secret of training trees—pruning. "The gardener tries to find the happy medium between foliage and branches growing in meaningless wild disorder and those pruned to the point where man's dominance is too patently evident," says the book *Japanese Gardens for Today*. He aims to emphasize the most attractive parts of a tree by lopping off everything that distracts. Does he want to spread the tree out in one direction? Then he prunes the vertical branches. As a result the nourishing sap will go to the lateral branches and thus alter the shape of the tree.

However, more is required. Every spring the tips of new buds are pinched off. This leaves about one inch of the bud at the end of each twig so that the branch spread is controlled. Also, year-old needles are plucked off by hand in September. This results in the floating, winglike appearance of Japanese pine trees.

Pines when well cared for can live for hundreds of years. To ensure for them a long life free of disease, the gardener continually works at keeping them healthy. One unusual way he does this is by bandaging a portion of the trunk with straw matting. As winter sets in, vermin living in the tree seek warmth and therefore come down and embed themselves and their eggs in the straw. In midwinter, before warm spring days call the insects out, the matting is removed and burned together with the vermin. When the straw matting is applied full length to other trees, such as palms, it protects the trees from snow and freezing. Besides keeping the trees warm, the jaunty suit of straw also brightens up the bleak winter landscape.

The whole operation is an art not easily mastered or copied. Indeed, to care for some of these long-lived trees, it takes generations of gardeners.

Family Gardens

Compared with more elaborate gardens in public areas, Japanese family gardens have a less formal and more intimate atmosphere. There is a never ending opportunity to mix and match greenery according to personal preference and imagination.

Using large rocks and small trees, some families create their own miniature mountain scene complete with a gushing waterfall or a quietly meandering stream. Even if the home has only a few feet of garden space tucked in a corner, the same principles of miniaturization used in planting larger areas can be incorporated. And with the help of skillfully sculptured trees, behold! the illusion is accomplished.

Wherever on earth you may live, the same principles that are used in creating beautiful Japanese gardens can bring the grandeur of nature into your garden.

Watching the World

Blood Scandal in France

"A disaster unprecedented in Western Europe." That is how the French newspaper *Le Monde* recently described the scandal over the practice of collecting blood from prisoners to use in transfusions. In the 1980's some 5,000 French patients contracted AIDS from contaminated blood—reportedly the worst such infection rate in the world. In 1985 blood collected in prisons accounted for over 25 percent of contaminated blood units. According to a report prepared by the Social Affairs Board of Inspectors and the Legal Services Board of Inspectors, the practice of collecting blood in prisons began in 1954, apparently influenced by what the report calls "economic factors." As early as 1983, the French Health Inspectorate recommended that blood not be drawn from high-risk donors; yet, prison officials actually sped up the rate of collection in the following year.

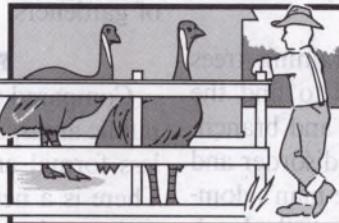
Honesty on the Wane

"There is a hole in the moral ozone layer and it is probably getting bigger." Thus concludes Michael Josephson, founder and president of the Institute of Ethics in California, U.S.A. His institute conducted a survey of nearly 7,000 high school and college students and came up with troubling findings. A third of the high school students and a seventh of the college students admitted to shoplifting within the last year. One eighth of the college students had done all the following: lied to an insurance company, lied on financial aid forms, lied about expenses, and borrowed money with no intention of repaying it. According to Josephson, all this dishonesty in

young people is "simply an amplified echo of the worst in the adult world." *The Washington Post* sums up his view: "Dishonesty and unethical behavior are widespread among younger Americans because it is increasingly widespread among adults."

Emu Farming?

The Australian emu—a large, flightless bird similar to the ostrich—may soon become a significant source of income. In 1991 emu meat was legally classified as a form of poultry. Emu farming may thus take off in the near future. *The Sydney Morning Herald* quotes a spokesman from the Australian National Parks and Wildlife Services as saying: "Virtually the



whole animal can be used. There is even a market for toenails; they polish them and make them into jewellery." Emu meat is said to be low in fat and cholesterol, yet high in protein. The large birds also yield two kinds of leather: garment quality from their body and reptilian style from their legs. Emus even produce oils that can be used in making cosmetics. Products from one adult emu have a value of between A\$300 and A\$350.

Indonesia's Coral Reefs Threatened

"Indonesia's marine area contains the richest and most diverse

coral reef communities in the world," *The Jakarta Post* noted recently. Beside being an important tourist attraction and the source of many pharmaceutical and medical products, these complex and beautiful ecosystems protect the shoreline from erosion and soften the impact of storms on coastal communities. The *Post* reports that the very existence of these precious reefs is now threatened by man's pollution, by his dredging for construction, by his coral collecting, and by such destructive fishing methods as dynamiting, net dragging, and the use of poisons. The *Post* reports: "Once a reef is destroyed it takes about 20 years for the first species to reappear and 50 to 100 years for any sort of diversity to return."

Exercise and Sleep

"For older men, exercise may be the solution to better sleep," reports the magazine *Arthritis Today*. In a recent study in North Carolina, U.S.A., a group of 24 men from 60 to 72 years of age was divided into two groups. For at least a year, one group exercised vigorously three times a week or more; the other group exercised minimally and irregularly. The men who exercised regularly and vigorously, it was found, fell asleep on average twice as fast as their sedentary counterparts. This held true whether they were tested on the day that they had exercised or on another day. The magazine adds: "They also spent less time awake at night."

Young Drinkers

"Nearly 90,000 children in Britain are regarded as excessive drinkers," reports *The Sunday Times* of

London. The British government defines a weekly maximum of 21 units of alcohol for men and 14 for women. A unit is one glass of wine or one measure of stronger liquor or half a pint of beer. A recent study of 18,000 British schoolchildren found that 11.5 percent of the 15-year-old boys were drinking more than the recommended weekly limit for adult men. Among girls, 1 in 20 of the 14- and 15-year-olds admitted to drinking more than the limit set for grown women. Researchers believe that these disturbing figures underestimate the real scale of the problem.

Church Failure Promotes Paganism

Hundreds attended a Midsummer's Night festival recently held in the woods of rural central Russia. This marks a revival of paganism, says Alexei Dobrovolsky, the leader of a small group of nature worshipers. His rituals include walking through fire and "unbaptizing" people, cleansing them from the sprinkled "holy water" of the church. These "pagans" also celebrate the birth of the sun each year on December 25. After some 13 years in labor camps, Dobrovolsky started preaching this pagan revival. Why the call to paganism? He reportedly holds that the Russian Orthodox Church compromised itself by cooperating with the now defunct Communist government. He claims: "The church was always a sell-out. It always served the strong."

Saving the Desert Elephant

The disease anthrax recently threatened the 29 elephants in Africa's vast Namib Desert. Conservationists were concerned, as an elephant with anthrax may die within 24 hours. So with international monetary help, they under-

took the daunting task of vaccinating the herd from a helicopter. Two men, hanging out precariously on either side, took aim through a churned-up cloud of dust at each milling, panicky elephant. One man shot darts containing the vaccine, the other squirted colored dye to mark each vaccinated elephant. All in all, 21 elephants were successfully "shot" to the satisfaction of the conservationists. The whole costly and dangerous operation was deemed worthwhile in order to save the only true desert elephants in the world.

Hazardous Driving

Reading road maps, talking into tape recorders, using mobile telephones, women changing their stockings. These, according to *The Star*, a South African newspaper, are some of the things people do while driving, sometimes at speeds in excess of 60 miles per hour. One safety official notes that he often sees people flossing their teeth



with both hands while driving! Drivers have also been seen brushing and rinsing their teeth. One woman gave her son a haircut while driving him to school. A mother was observed changing her baby's diaper while driving at 55 miles per hour. Why do drivers take such risks? One official said that long distances and traffic congestion may tempt drivers to make "good" use of the time spent in the car. He pointed out, however, that these distractions can result in serious accidents.

Are Cesarean Births Safer?

Many women choose to give birth by cesarean in the belief that surgery will be safer and less painful. According to the *Jornal do Brasil*, many doctors also prefer to perform a cesarean, since while a normal "birth generally takes on the average from 8 to 12 hours and has no fixed date to occur, the operation can be planned and takes at most an hour." However, obstetrician Fernando Estellita Lins is quoted as saying: "The number of fatalities, because of infections and hemorrhaging due to surgery, is much higher among women who have a cesarean." Brazilian research showed that maternal mortality "by vaginal childbirth was 43 per 100 thousand, while by cesarean it was 95 per 100 thousand."

The Worst Plague in History

The scientific community reconfirms the severity of the Spanish influenza. According to *The New York Times Magazine*, 196,000 people died in the United States alone during the month of October 1918. "By the end of the winter of 1918-19, two billion people around the world had come down with influenza, and between 20 million and 40 million had died," the magazine says. John R. La Montagne, an official at the National Institute of Allergy and Infectious Diseases in Bethesda, Maryland, noted that the Spanish flu of 1918 was "the most devastating epidemic that we have ever had in history." True, back in the year 1347, the bubonic plague, or Black Death, dealt humankind a devastating blow that lasted four years. But according to the magazine, the 1918 "pandemic killed as many people in a single year as died in the four-year Black Death."

From Our Readers

Lead Poisoning I just finished reading the articles "Lead Poisoning—Are You and Your Children at Risk?" (November 22, 1992) and would like to thank you for your timely, balanced, articles. I hope someday you can write a similar article about the connection between aluminum and Alzheimer's disease.

D. C., Canada

This issue was already mentioned briefly in the article "Pollution—Who Causes It?" in our May 8, 1990, issue.—ED.

Youngest Child I'm 13 years old and the youngest of five. The article "Young People Ask . . . Why Do I Have to be the Youngest Child?" (October 8, 1992) was greatly appreciated. I feel exactly like some of the kids you quoted, and I hope this article will benefit my entire family. Thank you for helping us young people.

C. M., United States

I'm the middle child, but a lot of what this article said applies to the way I feel. I too feel as if I'm paying for the mistakes my brother made. My curfew is something like nine o'clock because of him. My sister and I share a room, and I don't have any privacy. Still, I'm glad I'm the middle child, with an older brother to learn from and a younger sister that I can teach. I'm never really alone. So thank you for writing such an article; I may not be the youngest child, but I benefited from it.

N. R., United States

Hands As I read the article "Our Fascinating Hands" (August 8, 1992), I could not resist looking at my own hands. I had never given thought to how wonderful these tools are that Jehovah has given us. How can some believe that humans are the result of evolution? I believe many will change their mind when they read this article.

E. M., Brazil

Iron Lung I am writing with my eyes full of tears after reading Laurel Nisbet's story, "Not Even an Iron Lung Could Stop Her Preaching." (January 22, 1993) Her faith is an example for all of us. It was moving to read how she was able to use her situation to help a number of others to get to know Jehovah. She was also determined not to violate the sanctity of blood and used all her strength to explain her position to her doctor, even when close to death. Thank you with all my heart for publishing her experience.

Y. C., Italy

Critical Parents The "Young People Ask . . ." articles "Why Is Nothing I Do Ever Good Enough?" (November 22, 1992) and "How Can I Deal With My Parents' Criticisms?" (December 8, 1992) came at just the right time. I was feeling depressed because my father always found something to grumble about. Now I intend to make a real effort to accept criticism calmly and not resentfully refuse it.

M. Z., Italy

The articles really hit home. I have always believed my parents criticized me because I couldn't do anything right. Your article helped me see that their discipline is a product of their love and that they want me to succeed. Since I read your article, my parents have had a lot less to complain about.

S. P., United States

My mother is not a Christian, and nothing I've done has ever been good enough for her. But this article helped me to understand her better. The outcome of my effort? She listens now and has come to believe what I am telling her from God's Word!

M. T., Philippines

Where Cows Fly

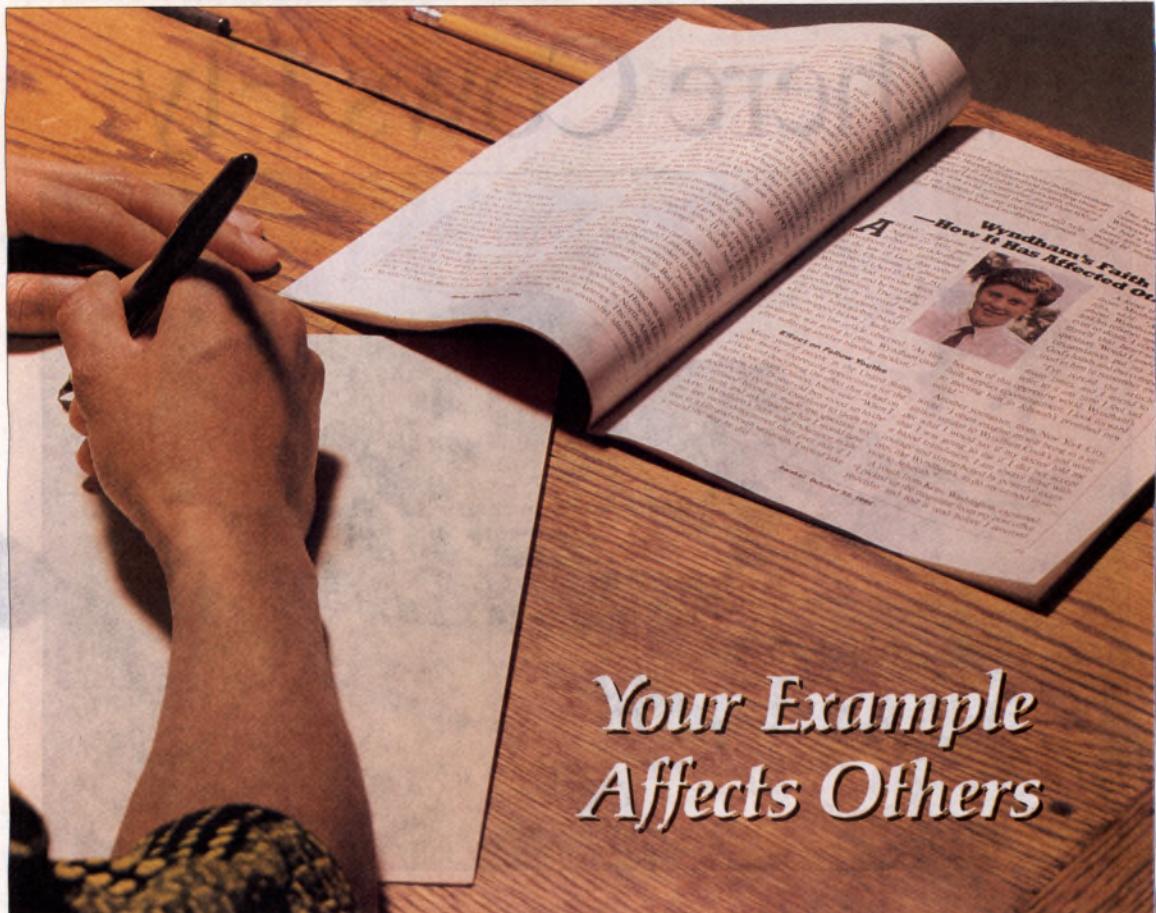


THE fierce winds of the Shetland Islands came to the world's attention on January 5, 1993. They took hold of the *Braer*, a 797-foot-long, 45,000-ton oil tanker, and slammed it against this rocky outpost of northern Scotland. Within a week the wind and the waves had broken the huge ship into four pieces.

Howling windstorms are nothing new to Shetlanders. The remote group of about 100 islands, fewer than 20 of which are inhabited, stand first to meet the frigid gales that hurtle in unhindered from across the sea near Iceland.

Not surprisingly, the inhabitants have become accustomed to strange sights. One man,

quoted in *The Wall Street Journal*, said: "Maybe there should be signs in Shetland: Beware of flying cows." An acquaintance of his had one of his cows blown clear out of a pasture a few years ago. Another resident, a scientist, reported seeing his pet cat "fly" as far as 15 feet in the wind—always landing on its feet, of course. Drivers commonly load their vehicles with heavy materials, such as coal, to prevent them from being blown off the roads. People too have been blown off the ground, some even killed. One gust, which killed a woman, reached an unofficial velocity of 201 miles per hour—unofficial because the official wind gauge blew away in the same storm!



Your Example Affects Others

EVERYONE exercises some kind of influence on others, either for good or for bad. A young person from Nigeria wrote last November:

"I can't hold back any longer. When I read the effect that Wyndham's faith had on many youths like me (the October 22, 1992, *Awake!* article "Wyndham's Faith—How It Has Affected Others"), I knew I just had to write. My eyes were filled with tears. I think of Wyndham so much, as if I had known him.

"I was seriously sick that very week and about to be taken to the hospital. I prayed to Jehovah God that if the doctor should suggest blood transfusion, He would strengthen

me and give me courage to stand firm in my convictions as Wyndham Cook did, even if I should die.

"As I write I've not yet fully recovered, but I thank you for presenting such a strengthening and encouraging article."

Awake! does much more than help readers cope with problems. It also builds confidence in the Creator's promise of a peaceful and secure new world.