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ABSTRACT

Everyone has the opportunity to make a difference in turning around the mounting environmental crisis. The purpose of this document is to outline choices a person can make and actions people can take to save the earth from continuing environmental deterioration. This booklet contains concise explanations of environmental problems and tips that individuals can follow every day. Topics include air and water pollution, land use, energy conservation, and consumer issues. A short quiz on solid waste disposal and a daily conservation checklist are included. (CW)

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TIPS



EASY ENVIRONMENTAL TIPS
TO SAVE THE EARTH

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This booklet was produced by the Corporation for Public Broadcasting, the Public Broadcasting Outreach Alliance, and your local PBS station in cooperation with the following organizations:

- American Association of School Administrators
- National Association of Secondary School Principals
- National Education Association
- National PTA
- National School Boards Association

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The Corporation for Public Broadcasting is responsible for the growth and development of public broadcasting in the United States. It created and funds the Public Television Outreach Alliance, a consortium of public television stations, to coordinate programming and community outreach campaigns which focus on major social problems facing this country — such as the environment.

For comments and further information about this booklet, write to "SAVE IT!," Corporation for Public Broadcasting, 901 E Street NW, Washington, DC 20004.

All requests for ordering information and bulk order forms — there is no single-copy fulfillment — for a related "SAVE IT!" sticker, full-color poster, and this booklet should be directed to: "SAVE IT!," c/o Custom Print, Inc., 2611 Shirlington Road, Arlington, Va. 22206, (703) 979-8473.

Each of us has the opportunity to make a difference in turning around a mounting environmental crisis. "SAVE IT!" outlines choices you can make and actions you can take to save the earth from continuing environmental deterioration and to preserve it for future generations.

The booklet contains easy, straightforward environmental tips that individuals of all ages can follow every day. You don't have to make *major* changes in your lifestyle. The key is to make the recommended small changes a habit — a daily routine.

"SAVE IT!" also includes concise explanations of key environmental problems: air, water, and land pollution and energy conservation. A section on shopping explains how our buying choices affect the environment. Junior and senior high school students and youth groups can use the booklet to increase environmental awareness and to get ideas for activities and projects. Parents can use these explanations and activities to help youngsters better understand complex issues. Teachers can make these explanations and suggested tips and activities an important part of environmental education or social studies lessons. Communities and organizations can use the booklet to initiate environmental action plans.

The booklet is by no means a complete guide to improving the environment because many environmental issues are complicated and require action by business and industry and by governments at a local, state, national, and international level. Instead, "SAVE IT!" concentrates on the things that are easy for us as individuals to accomplish in our daily lives.

The multiplier effect is important: *Many* individuals doing *many* of these things every day. And beyond that: Applying that increased environmental consciousness to our expectations of our employees, schools, groups, communities, and governments at all levels.

Whether you're a student, parent, teacher, or youth group leader, and whether you live in a city, suburb, or rural area, you can use "SAVE IT!" to help you make the right decisions for the environment's sake — and yours.

Use This Booklet To

Make a World of Difference



Little Things Mean a Lot

Just for a moment, consider a few of the little things you might have done today. Did you: Take a long shower? Put your daily newspaper in the trash? Drink from a plastic or foam cup and throw it away? Drive alone or with just one other person in an inefficient, gas-guzzling car? Leave lights, TV, or stereo on when not in the room? Carelessly litter?

These simple, everyday things we all do without thinking have a devastating, *cumulative* impact on our environment. Car and industrial emissions pollute our air. Rising mountains of trash choke our landfills, and hazardous wastes pollute our rivers, streams, and groundwater. The energy we squander depletes many resources that we cannot renew.

Planet Earth is in serious trouble. But worrying excessively, blaming ourselves or others, or feeling powerless because the problem is overwhelming and "I'm just one person" isn't the answer. The answer is to begin. To make some changes — small, everyday changes — that will help restore and save our environment. To demonstrate a respect for nature in the way we lead our daily lives.

Many environmental experts say the planet's health is at a critical turning point. The next 10 years are crucial. A turnaround requires people of all ages willing to make changes in their lifestyles and to encourage environmental commitments by their local industries and communities.

Many people are concerned that cleaning up our environment will mean too many sacrifices, too much deprivation. But creating a healthy environment can bring the joy of creating visible changes. It can bring us back to basic values and help us restore a better balance with nature. Working to save the environment can bring families, students, organization members, and communities together in developing solutions.



Believe it or not, you have something in common with the dinosaurs. You're breathing the same air and drinking the same water they did. Mother Earth is the greatest recycler of all. She uses the energy of the sun to recycle air and water over and over again, generation after generation.

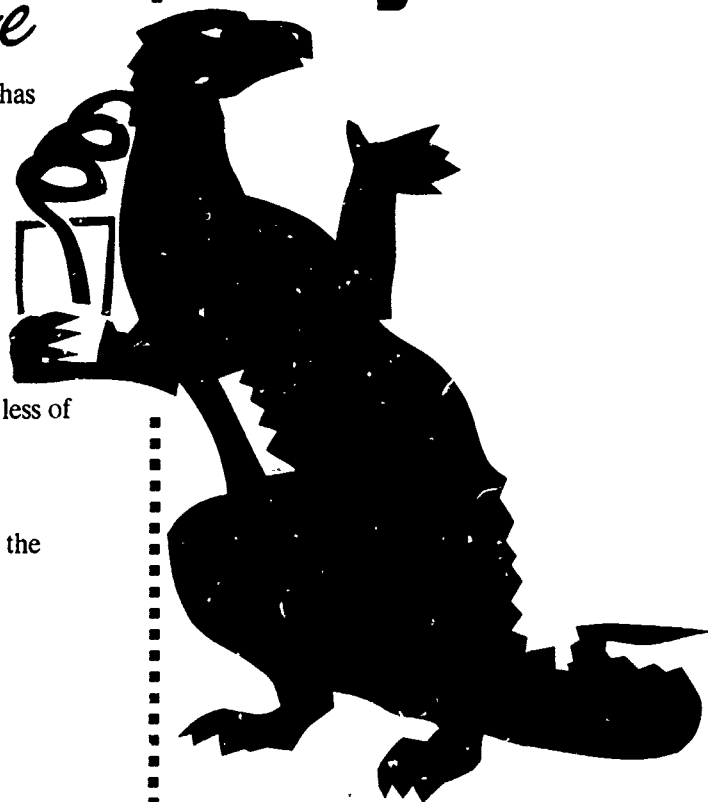
For a very long time, Nature's way of recycling worked just fine. Nature could handle pollution from natural sources (human and animal wastes, volcanic eruptions, forest fires) very well, and our air, land, and water stayed clean and pure. Many earlier societies respected the earth and tried to live in harmony with it. But as human populations grew dramatically, and the Industrial Age dawned and accelerated, things began to change. Cars. Factories. Power plants. New toxic products. More wastes from more people. Reckless attitudes. The combination created more pollution.

How on Earth Did Things Get This Way?

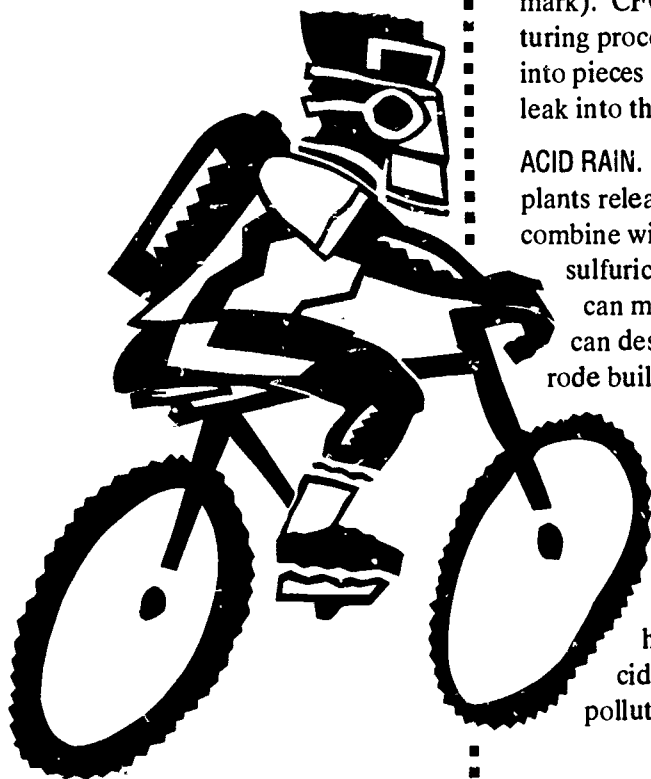
More Than Our Share

Our modern, technological, industrialized, consumer society has taken a toll on nature. The United States, which represents only 5 percent of the world's population, uses 25 percent of the world's resources and consumes more than 30 percent of the world's energy. We own more than 135 million cars — about one-third of the world's total. We emit more than 20 percent of the gases that contribute to global warming. We generate a greater share of the world's waste and recycle less of it than any other industrialized country.

Turning back the clock or looking to others to "fix it" are not the answers. Polls show that Americans have a deep concern about the environment. The answer is to turn that concern into concrete actions — every day.



Let's Clear the Air *— Everywhere*



Some days you don't need a weatherman to tell you about air quality. You can feel it. Polluted air contains enough chemicals from cars, factories, and other sources to harm people, plants, and animals. Annual health care costs associated with air pollution in the United States are now \$40 to \$50 billion, estimates the American Lung Association.

OUTDOORS — A TRIPLE WHAMMY

Outdoors, there are three major air pollution problems:

SMOG. Hydrocarbon vapors (from power plants, motor vehicles, dry cleaning plants, chimneys, and products like paint and cleaning solvents) escape into the air. They mix with other pollutants from smokestacks and car exhausts. In sunshine, they change chemically into ozone — the prime ingredient in smog. Winds carry the pollutants in smog for miles. Smog makes breathing harder, affects wildlife, and can slow the growth of plants or even kill them.

OZONE LAYER DEPLETION. Ozone is dangerous at ground level in smog. But in the upper atmosphere, it is essential. It helps screen out the sun's harmful ultraviolet rays that cause skin cancers, cataracts, and bad sunburns. Manmade chemicals, chiefly chlorofluorocarbons (CFCs), are destroying that protective ozone shield. Already, scientists have detected a hole in the ozone layer over the South Pole that's as wide as the United States.

CFC gases come from many things commonly found in the home — refrigerators, air conditioners, aerosol sprays, cleaning fluids, polystyrene foam drinking cups, and other products made of lightweight, disposable foam (often called "Styrofoam," a trademark). CFCs aren't released into the air only during the manufacturing process. They are also released when foam containers break into pieces and when gases in air conditioners and refrigerators leak into the air.

ACID RAIN. Cars, trucks, buses, and coal-burning electric power plants release sulfur and nitrogen oxides into the air. Those gases combine with moisture in the atmosphere and return to earth as sulfuric and nitric acids in rain, snow, sleet, or fog. Acid rain can make lake water too acidic for some fish to live. It also can destroy plant and animal life, damage forests, and corrode buildings.

INDOORS — NO ESCAPE FROM AIR POLLUTION

INDOOR AIR POLLUTION. "Tight," energy-efficient buildings whose windows won't open heighten the growing problem of indoor air pollution. From tobacco smoke, radon gas, and asbestos to everyday household products, such as air fresheners and pesticides, people are being exposed to increased indoor air pollution at home, at school, and at the office.

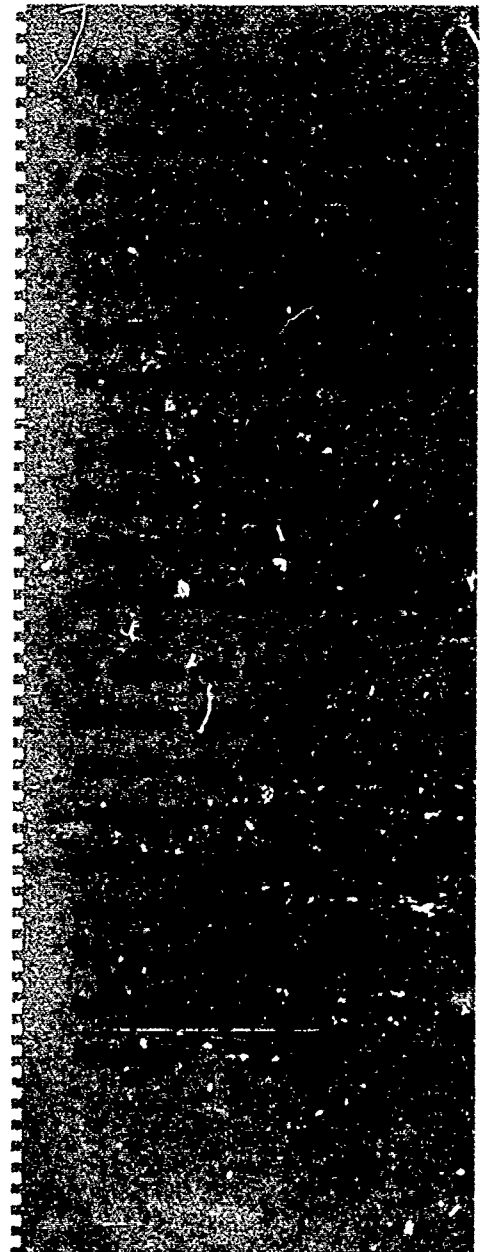


Save

THE AIR

T I P S

- ▶ Say "no" to disposable foam products. Use a mug or glass — or a paper cup when necessary — instead of foam cups for beverages. Buy eggs in cardboard boxes.
- ▶ Develop a "green thumb." Put plants in your home, office, or classroom. They help clean indoor air by absorbing certain chemicals.
- ▶ When you're filling your car with gasoline, don't let any gas spill. Vapors from spills pollute the air.
- ▶ Avoid aerosol sprays. Choose roll-on products whenever you can. Spray paint and spray deodorants release hydrocarbons into the air.
- ▶ Give a bug a break! Return it to its outdoor home if you can. Swat it if you must. Don't spray it. Most household insecticides contain poisons that circulate in the environment long after the bug is gone.
- ▶ Eliminate at least one or two not-so-necessary car trips a week. Group your errands for fewer trips. Driving less not only decreases air pollution but also saves energy.



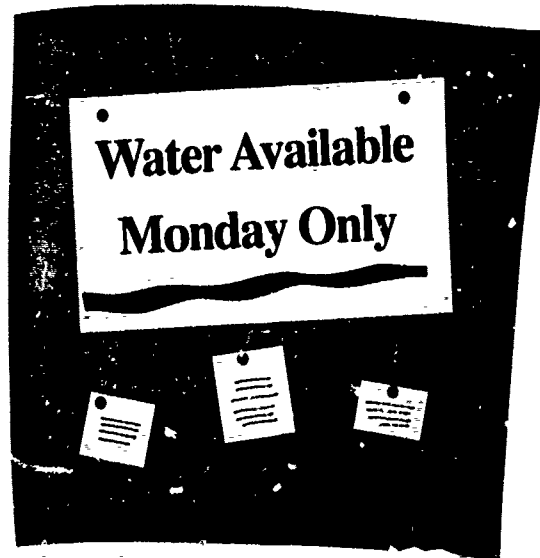
Water, Water Everywhere but ...

Clean water is a precious but limited resource. People waste too much of it and contaminate what's left. Most of the earth's water is ocean water that contains salt. Less than 1 percent of all earth's water is usable, fresh water. Drinking water comes from that 1 percent, either from surface water (lakes, streams, rivers) or from groundwater beneath the earth's surface. Groundwater is increasingly polluted by toxic waste sites, fertilizers, pesticides, sewage, and household chemicals dumped on the ground or down the drain.

THE OCEANS: A TIDE OF PLASTICS

Oceans seem so vast that it's often assumed nothing can harm them. But our oceans and coastal zones — waters within 200 miles of land — are being damaged by oil spills; waste from cities and industries; soil erosion; sludge; pesticides and fertilizers from our farms; overflowing sewers that spill raw sewage; and garbage tossed overboard by fishermen, ocean-going ships, and recreational boaters.

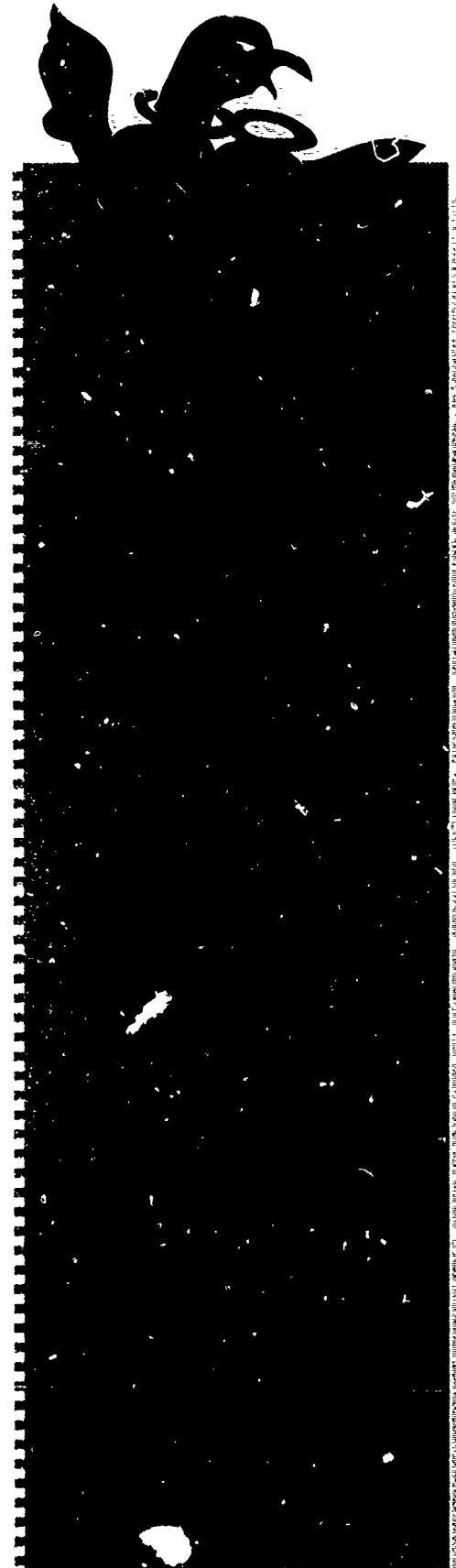
Strong, durable, floating plastic wastes — bottles, bags, nets — kill millions of birds, fish, and whales and other mammals that mistake the plastic items for food or become entangled. Plastic rings from six-packs of beverages can strangle birds or cause intestinal damage when swallowed.



Save THE WATER

T I P S

- ▶ Take showers, not baths. Showers use about a third as much water as baths if they're kept to five minutes or less.
- ▶ Turn off the water while brushing your teeth, shaving, or washing dishes rather than letting it run while not in use. This saves some 10 gallons of water.
- ▶ Wait until you have a full load to machine wash clothes or dishes. Partial loads waste both water and energy.
- ▶ Water your lawn early in the morning or late at night to minimize evaporation.
- ▶ When washing a car, use a hose with a shut-off nozzle so that water doesn't run needlessly.
- ▶ Sweep your sidewalk, driveway, or patio rather than hose it down.
- ▶ Buy plain white paper towels, napkins, and toilet paper. Dyed paper pollutes water.
- ▶ Cut each loop of the plastic holders found on beverage six-packs before you throw them away.
- ▶ If you're fishing, swimming, or boating at a lake or beach, bring a container for trash with you rather than throwing trash into the water.
- ▶ Use household chemicals completely before tossing containers. Solvents and cleaners in landfills seep into groundwater. Do not pour chemicals down the drain. Contact your sanitation department for the nearest hazardous waste center.



This Land Is Your Land ...

America's wide open spaces are becoming more myth than reality. Logging, mining, oil exploration, and other industrial uses have scarred the land. Trash is everywhere. Landfills are overflowing with garbage. Enormous tracts of lands in the public domain — one-quarter of the total land surface of the United States — are in danger. Farmland is lost to industrial and residential sprawl. Millions of agricultural acres suffer from soil erosion and water pollution. On the global front, the destruction of the world's tropical rain forests is creating serious environmental repercussions.

LET'S TALK TRASH

Before continuing with this section, turn to page 16 and take the garbage quiz. As you can see from the quiz, we produce far too much trash. Each U.S. citizen produces some four pounds of solid waste (paper, aluminum, glass jars, broken televisions, and other trash) each day. Multiply that figure by the number of people in your home, your neighborhood, your community to see the magnitude of the trash production problem. We recycle only about 10 percent of all trash, incinerate (burn) another 10 percent, and put 80 percent into our landfills. But landfills are running out of space, and burning trash creates pollution problems.

Worse, much of that trash is hazardous. Products in our homes — mothballs, insecticides, oven cleaners — can be toxic and can cause pollution. When buried or disposed of improperly, hazardous substances pollute water and poison soil. Every year in the United States alone, the amount of used motor oil that is dumped out and not recycled is 10 to 20 times the amount the Exxon Valdez oil tanker spilled off the coast of Alaska in 1989. That oil spill fouled hundreds of miles of shoreline and killed thousands of animals.



Save THE LAND

TIPS

To cut down on waste, practice the Environmental Three Rs:
REDUCE, REUSE, RECYCLE.

REDUCE:

- ▶ Make less trash. Don't buy goods overpackaged with lots of plastic, or foam. Buy items in bulk when you can.
- ▶ Carry a trash bag in your car or keep your trash with you until you can find a garbage can. Don't litter.
- ▶ Say "No bag, please" when you're buying something small and easy to carry. Or ask for a paper, not plastic, bag.
- ▶ Take paper bags, tote bags, or net bags to the grocery store or other stores.
- ▶ Wipe up spills with a sponge or rag instead of a paper towel.
- ▶ Use both sides of a piece of paper for writing, drawing, or photocopying.

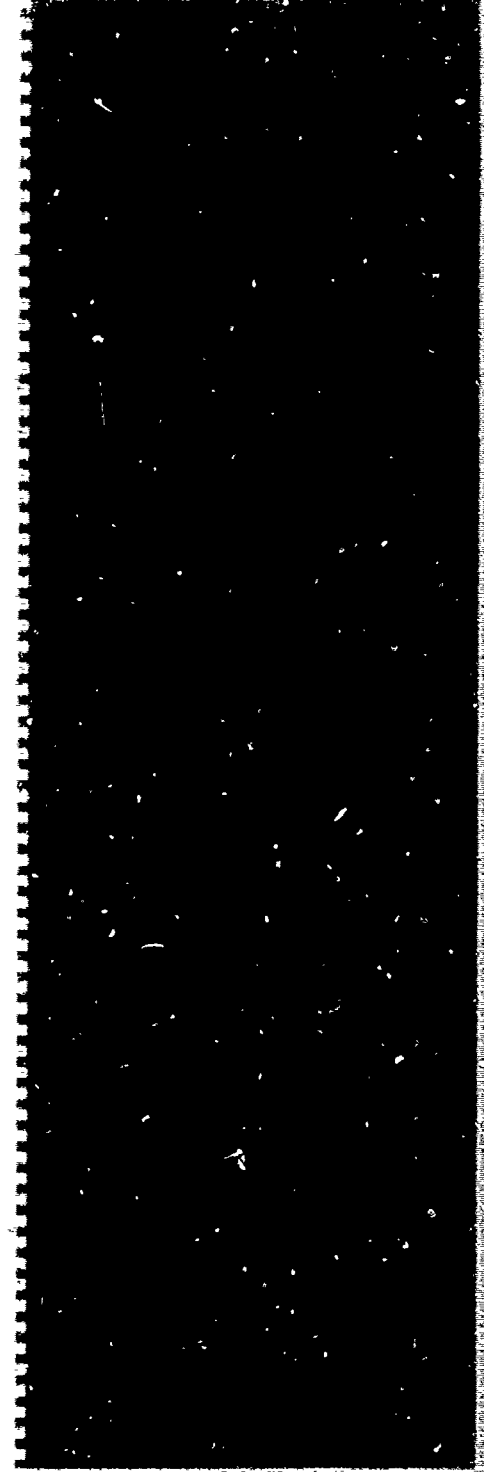
REUSE:

- ▶ Use the backs of unwanted junk letters and envelopes for shopping lists or notes.
- ▶ Reuse small plastic bags, glass jars, or plastic containers for leftovers, and paper bags for trash.
- ▶ Use the Sunday comic strips to wrap gifts.
- ▶ Donate margarine tubs, juice cans, and paper towels, toilet paper rolls to a school or community center for arts and crafts projects.
- ▶ Share magazines and books you've read with friends or give them to a library, hospital, or senior citizen center.
- ▶ Reuse aluminum foil and pie pans as many times as possible.
- ▶ Repair rather than toss whatever possible. Give to charities items in *good* condition rather than dispose of them.

RECYCLE:

- ▶ At home, recycle newspapers, glass, and aluminum. Many communities have curbside pickups for these items. If yours doesn't, take your newspapers and other recyclables to community or commercial recycling centers.

- ▶ Turn your workplace into a recycling center. Use desktop containers to separate high-grade paper for recycling.



Energy Issues

Heating Up

Energy provides our heat, light, and fuel. We used to depend on wood. Today we're almost totally dependent on fossil fuels — oil, coal, and natural gas — which come from the remains of ancient plants and animals. Experts estimate that if we all used just 10 percent less electricity, we would save three billion gallons of oil a year. Dependence on fossil fuels is causing a variety of environmental problems: Drilling oil wells or strip mining coal often damages or destroys natural habitats for birds and animals. Transporting fuels to consumers can be environmentally dangerous, as tanker oil spills make clear. And, most important, burning fossil fuels produces gases that damage our environment.

Some of these gases contribute to global warming or the so-called "greenhouse effect." Certain gases, such as carbon dioxide and CFCs, are released into the air and stay there, forming a blanket in the atmosphere which traps heat radiating from the earth. This manmade greenhouse effect is beginning to raise the earth's temperature and may ultimately create a hot, dry climate and contribute to rising sea levels which would cover existing land areas.

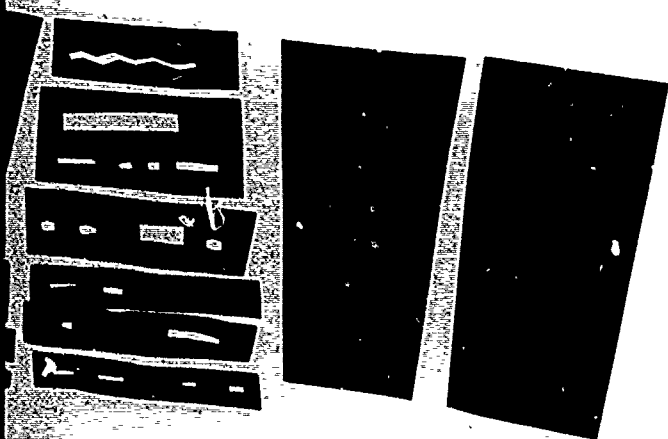
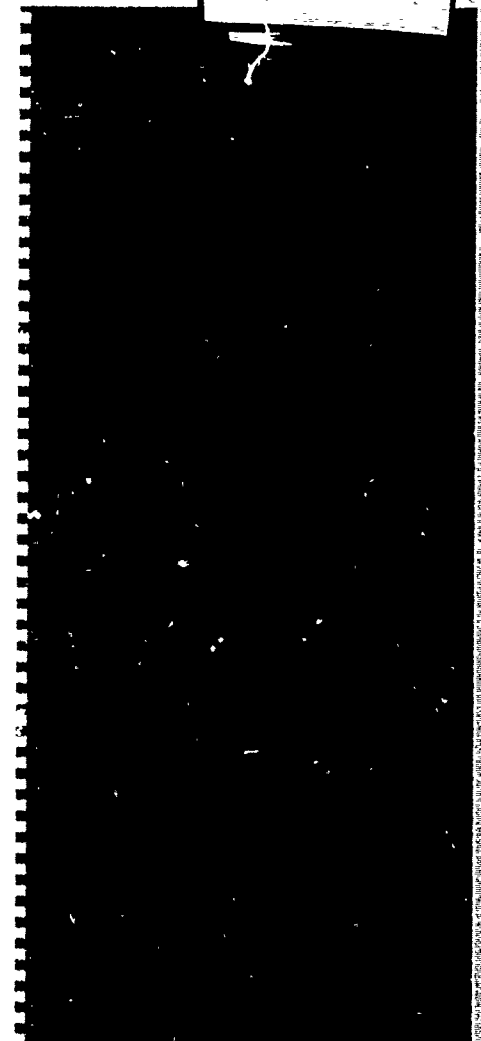
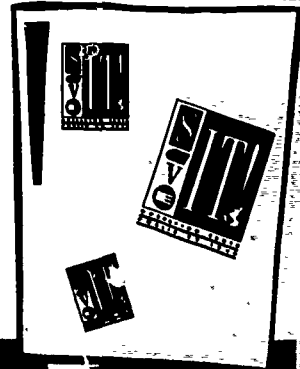
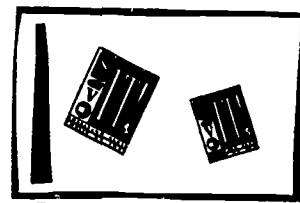
The United States alone emits more than 20 percent of the gases that contribute to global warming — about 55,000 pounds per person per year, says the National Audubon Society. But they note that if each of us were to cut down our carbon dioxide and other greenhouse gas emissions by only 2 percent a year, we could achieve a 20 percent reduction by the year 2000. That means we could slow the global warming trend.



Save THE ENERGY

T I P S

- ▶ Turn off lights and appliances when they are not in use.
- ▶ Study and work by daylight whenever possible.
- ▶ Don't open the refrigerator too often or leave the door open while you decide what to eat.
- ▶ Switch from incandescent to fluorescent light bulbs. Fluorescent bulbs burn 10 times longer and use one-fourth the energy. Those with problems with fluorescent lighting may be able to find compact fluorescent bulbs or full-spectrum fluorescent bulbs.
- ▶ In winter, turn down your thermostat by two degrees and wear a sweater if you're cold. In summer, use fans instead of air conditioners whenever possible or set your air conditioner two degrees higher.
- ▶ Wash your clothes in cold water, and hang clothes outside or inside to dry, when possible.
- ▶ Take a hike or ride a bike rather than tooling around in your car for fun. Use public transportation or a carpool whenever you can. Or walk, jog, or bike — great exercise and calorie burners, too.



Let the Buyer Beware,

“Born to shop.” “Shop till you drop.” “When the going gets tough, the tough go shopping.” These slogans express an underlying truth — Americans love to shop, oftentimes for fun or for relief of boredom. Our shopping habits and choices hurt the environment. We often buy too much and throw out much of it, or we put personal convenience above other concerns by choosing products we use once and then throw away. Disposable diapers are a good example. They’re a great convenience item, but every year some five million tons of diapers — which are not biodegradable and which contain raw, untreated sewage — clog up the country’s landfills.

SO MUCH FOR OLD SAYINGS

Another major issue is the amount and type of packaging for everything from toys and electronic items to food. Much product packaging has changed from recyclable materials such as glass, aluminum, and paper to plastic and foam.

There is an old saying: Good things come in small packages. But today, even tiny toys are sold in boxes many times their size. Once the toy gets home, the package is thrown away, adding to our solid waste problems. Not only does excess packaging contribute to our trash problem but also the process of manufacturing an elaborate package uses up large amounts of energy. Plastic packaging is a particular problem because plastics are made from coal and oil, nonrenewable fossil fuels. Also, many chemicals used to make plastics are extremely toxic.

We can protect the environment by making wise shopping choices and by making our preferences known.



Shopping TIPS

- ▶ Ask yourself: "Do I really need this item?" Don't buy it unless you do.
- ▶ Buy recycled paper and other products. Buy products with little or no packaging. And buy products in bulk when possible.
- ▶ Choose paper, glass, or metal rather than plastic packaging for milk, peanut butter, eggs, and other foods.
- ▶ Buy unbleached coffee filters. The bleaching process uses dioxin, a deadly toxin.
- ▶ Select reusable rather than disposable items. Choose one good quality, long-lasting pen or razor, for example, rather than a dozen cheaper ones you'll end up throwing away.
- ▶ When possible, buy clothes that don't need to be dry cleaned. The dry cleaning process uses toxic solvents.
- ▶ Choose cloth diapers over disposable ones. A diaper service can deliver sanitized diapers to your home if you prefer not to wash cloth diapers yourself.
- ▶ When shopping for a car or a major appliance, look for the most energy efficient ones.
- ▶ Use rechargeable batteries. They outlast disposable batteries and reduce waste.
- ▶ Shop by phone or by mail rather than by car where possible.
- ▶ Choose wooden instead of plastic toys.
- ▶ Purchase biodegradable, no-phosphate cleaning products and organic foods produced without pesticides when you can.



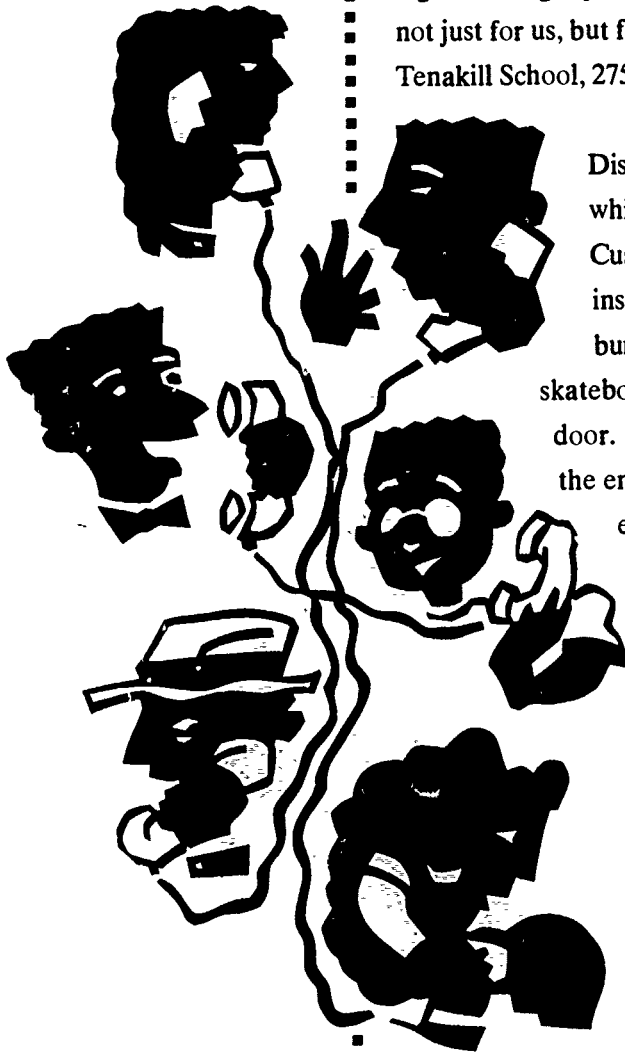
Spread the Word

Now that you've reviewed these tips, spread the word.

Encourage two friends, neighbors, classmates, or work colleagues to follow the tips outlined in this booklet. If those two in turn convinced two other people, and so on down the line, everyone in the United States would take action in less than a month, says the National Wildlife Federation.

Start, join, or support a local chapter of Kids Against Pollution (K.A.P.), which has chapters in some 26 states. K.A.P. won national recognition for its letter-writing campaigns and lobbying for stronger pollution laws. Their motto: "Save the earth, not just for us, but for future generations." Contact: K.A.P., Tenakill School, 275 High St., Closter, N.J. 07624.

Display your removable "SAVE IT!" sticker — which can be obtained in bulk quantities from Custom Print, Inc. (see details on booklet's inside front cover) — prominently on your car bumper, bicycle, apparel, backpack, tote bag, skateboard, bulletin board, refrigerator, or office door. It means you're committed to improving the environment and to making changes in your everyday lifestyle — changes that will improve the quality of the environment for everyone.

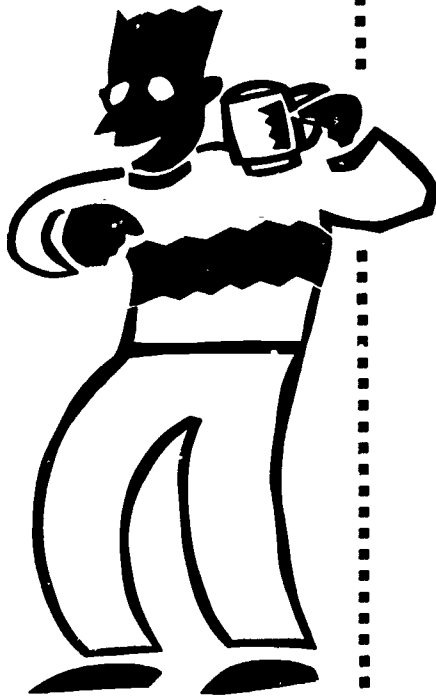


If we could now step into the next century in the year 2001 — not that far away — what would we find? A world headed for environmental disaster if we continue on our present course? A world with unhealthy, murky air and water? Or a world where people can breathe easily and drink pure water, where forests grow, and where animals of all species still roam? A world where life is an unpleasant struggle for all inhabitants? Or a world where people and nature live in a harmonious balance for the benefit of all? The choices we all make now affect our world of tomorrow.

Back to the *Future*



It's All Garbage — A Quiz



Take this short quiz to test your knowledge about a growing environmental problem — garbage. The quiz was adapted from public television's *The Rotten Truth: A 3-2-1 Contact Extra*. The answers may surprise you. Turn this page upside down to see how you did.

1) **How many pounds of garbage does an average American family of four produce in a week?**

- a) 4 lbs.
- b) 20 lbs.
- c) 100 lbs.
- d) 3,360 lbs.

If left outside, how long would it take these items — frequently found in our country's garbage — to disintegrate?

2) **Banana peel:**

- a) 6 months
- b) 2-5 weeks
- c) 4 days
- d) a year

3) **Winter socks:**

- a) 6 months
- b) more than a year
- c) 12 weeks
- d) 10 years

4) **Plastic bag:**

- a) 2-5 weeks
- b) 6 months
- c) 30 years
- d) a year

5) **Newspaper:**

- a) 20-30 years
- b) 6 months
- c) 5 years
- d) 5 weeks

6) **Which of the following items will last longest on the earth?**

- a) a disposable diaper
- b) a wooden chair
- c) a glass bottle
- d) the Statue of Liberty

Check your answers, and then turn back to page 8.

Answers: 1) c — 100 lbs.
2) b — 2-5 weeks 3) b — more than a year 4) c — 30 years
5) b — 6 months 6) c — a glass bottle can last a million years; the
Statue of Liberty, 1,500 years; a disposable diaper, 300-500 years;
a chair, 20 years.



DAILY CHECKLIST

This booklet suggests a number of easy steps you can take to help save the environment. From that list, we've selected 10 tips that we hope you'll follow every day. Make these small changes for one month — and they become habitual. Consider adding other tips from this booklet and elsewhere each month to create and build on your positive environmental actions to save the earth.

Today, I:

- Used a mug or glass instead of a foam cup
- Took a short shower
- Opened the refrigerator door less often than usual
- Turned off lights and appliances I wasn't using
- Adjusted the thermostat to save energy
- Walked, biked, took public transportation, or rode in a carpool
- Wrote on both sides of a piece of paper or wiped up a spill with a sponge
- Recycled my newspaper or one glass jar
- Said, "no bag, please" or "paper bag" for a purchase I made
- Asked a classmate, colleague, or friend to join the "SAVE IT!" campaign

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