IF YOU WANT TO SAVE YOUR ENVIRONMENT...





### Acknowledgments

This handbook is a compilation of ideas and suggestions regarding what you can do to save and restore our environment. They're all comparatively easy to do — and some of them will even save your dollars. However, we must all be aware that pollution control will cost money.

As of October, 1970, the information is up-to-date and accurate according to available information. However, there will be changes as research improves and expands our knowledge about these ecological problems.

Our grateful thanks to the many people who have given their time and talent to make this handbook real:

to Professor Paul B. Sears who helped us realize the need for such a handbook and who contributed the foreword/to Sam Smidt and Jan Melnick who designed it, to Atherton Advertising Typography who set the type, to Peninsula Press who printed it/to Professor John Hessel, Stanford University and Joseph F. Williamson, Garden Editor of Sunset Magazine, who evaluated the garden section/to the many other organizations who shared their information with us: Conservation Committee of the Co-op Market (Palo Alto), Ecology Action, Homemakers Against Pollution, League of Women Voters, Peninsula Conservation Center, Santa Barbara Underseas Foundation, and the Sierra Club/and to the many AAUW members and friends who worked with us.

The rest is up to you!

Carroll Harrington, Marie Niemeyer, Joyce Leonard — Palo Alto AAUW Linda Fischman — Homemakers Against Pollution

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Illustrations by Janet Melnick

### Foreword

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Americans no longer need to be warned of a disordered environment. Bad air, bad water, and waste speak for themselves. Demand for improvement is insistent and growing, notably among the young. Increasingly we are faced with the question, "What can I, one individual among millions, do?"

This, of course, is a hopeful improvement on our earlier complacency that counted on "Government" or "Science" to rescue us from any really serious danger. It is also a welcome relief from those who, aroused but often half-informed, are more intent on displaying their feelings than on getting results.

The United States, be it remembered, has two powerful instruments of change. One is the existence of voluntary organizations dedicated to the public good; more than a score of these are concerned with conserving and improving the environment. The other is a political system, which despite its flaws, will respond when citizens go to work on it.

Leadership and action at the national level are important. But our country is so vast and varied that simple, blanket solutions to its problems by the federal government are seldom effective. Environment conditions have to be faced where people live. Here, at the local community level, the individual has power to act if he uses it. Here is where pressure on the higher reaches of government can be generated. And perhaps most important, this is where individuals not only can exert political pressure, but where they can do things themselves for themselves. The question, of course, is how to proceed most effectively, with the least lost motion.

Among the most useful (and most steadily in demand) publications are the do-it-yourself manuals. My guess is that if there is any shortage of such material it has been precisely in practical guides to good citizenship. Now that the call, nation-wide, is for getting our much-abused environment into more livable shape, nothing could be more helpful than the guide-book which follows. I am not only happy to introduce it, but, as an old hand at what was long a discouraging game, am extremely grateful to the individuals and groups that have made it possible.

> Paul B. Sears Professor Emeritus of Conservation Yale University

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# WHAT YOU CAN DO AT HOME

## Avoid the Overuse of Plastic and Paper

Every year, Americans junk 20 million tons of paper. Wouldn't you rather have it stay trees? Trees provide beauty, oxygen, recreation, many other good things. Use as little as possible, recycle what you do use.

The use of plastic to wrap things is even worse. It doesn't decay or decompose. It will be around in our garbage dumps indefinitely. Industry is working on ways to re-use plastic, but for now, use it, too, as little as possible.

- ✓ Give up the use of disposable plastic and paper products. Change to china plates and cups, metal utensils, cloth napkins. Bring back the napkin ring — you can now get permanent press napkins you don't even have to iron.
- Recycle paper. Stack newspapers in bundles and save them for return to the paper and pulp industries. Flatten corrugated cardboard and save it for return.
- Use both sides of paper, re-use envelopes.
- Share your magazines with others or pass them on to hospitals or convalescent homes. After final use, they can be recycled in some localities.
- Invest in bright colored plastic dishes and cups, inexpensive uten-

sils, terry cloth napkins for the family picnics, instead of paperware. A different color cup for each family member can be used all day — when traveling, too — to cut down on paper cups.

- Avoid the use of plastic wrap or aluminum foil (it wastes a vital metal) in your kitchen. Use refrigerator containers or, if possible, wax paper.
- Avoid the use of disposable diapers.
- ✓ Use a dairy that delivers your milk in glass bottles that can be re-used. Milk cartons waste paper.
- ✓ Use brown paper bags when you buy fruit and vegetables instead of plastic bags. Many kinds of produce — melons, oranges, lemons, apples — don't need the extra brown bag at all.
- ✓ Use a mesh shopping bag the way many Europeans do. You can buy them at import stores, or encourage your grocery store to sell them. Tell your market why you want to use the mesh bag — the fewer extra wrappings you use, the more trees you save.
- Bring your own coffee mug to lunch or meetings, or suggest that your office or organization buy inexpensive, re-usable mugs. Refuse to use styrofoam or plastic cups.
- Avoid the use of big plastic throw-away garbage and trash bags. Trash tied up in plastic takes much longer to decompose.
- Every time you see excess packaging in grocery stores, department stores, etc. — turn it down and tell them why.

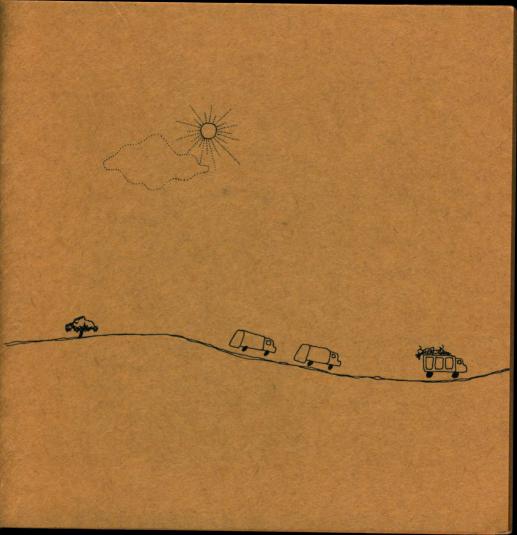
#### **Re-Use and Recycle Other Things**

With 6% of the world's population, the United States consumes 50% of the world's resources. Many of the natural products we use up cannot be replaced. We must learn not to throw away potentially valuable materials. They can be salvaged to make more products.

- Try to buy only return bottles of soda and beer.
- Buy drinks in aluminum cans as a second choice. They have a pop-top, no seams on the side and a rounded seamless bottom. Put the pop-top inside the can, flatten, and save for collection.
- Re-use jars and lids for canning and storing.
- Recycle glass. Wash and remove labels, caps, and aluminum rings from glass containers. They are now being accepted for collection by members of the Glass Container Manufacturers Institute among them, Owens-Illinois, Anchor Hocking, and Brockway Glass — in 27 states.
- Take old but still usable clothes, furniture, toys, etc. to local resale shops, Goodwill Industries, or the Salvation Army.
- Save rubber bands off the newspapers and the twist-ties from bread for re-use in your home.
- Sort and return wire coat hangers to your dry cleaners.
- Support laws that encourage companies to recycle material.

# **Cut Down The Mountain of Trash**

We generate 5.3 pounds of refuse per person per day and it costs us \$2.8 billion a year to get rid of it. We are rapidly coming to the



end of land in which to bury it or water in which to toss it.

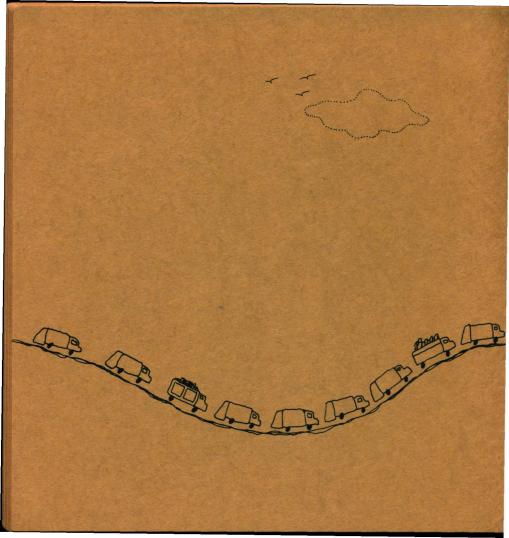
- Re-read all the suggestions about paper and plastic. It's by far the greater part of our junk.
- Don't put up with "planned obsolescence." If it's still usable, use it.
- If you aren't already doing it, start considering the fact that we will eventually have to sort our garbage.
- Support enterprises in the business of re-using materials that come from trash.
- Schools can use many discarded household items. So can nursery schools, Head Start, day care centers. For them, save all kinds of paper and cardboard containers, cardboard, Christmas and birthday cards and wraps, cans, spools, paper towel rolls, old jewelry and trimmings.
- Compress all cans, boxes, and cartons before putting them in the trash can. 98% of the space in your trash can is air.

## Shop With Your Environment in Mind

The housewives of America make up the largest purchasing agency in the world. What you buy determines what the manufacturers can sell. Tell them "NO" by not buying it, and they won't make it.

Buy only return bottles of soda and beer. Buy drinks in aluminum cans as a second choice. The cans can be recycled. Tell your grocery store manager you won't buy any more no-return bottles.
 Use more fresh fruits and vegetables, fewer pre-packaged foods.

- Learn to cook from scratch. It tastes better, is less expensive, and you avoid those chemical additives.
- Buy juices in concentrated form and mix them in your own container.
- ✓ BE INFORMED. Read labels carefully. Find out what preservatives and additives may be doing to your health.
- ✓ Avoid buying food in plastic containers, but if you must, save the containers for refrigerator storage.
- ✓ Tell the store manager about the things you're doing for conservation and the reasons why.
- Buy items in large family-size containers for economy. This also cuts down on the number of containers made and thrown away.
- Boycott products and services that are not working actively to cut down on pollution — and write letters to commend those that are. Be willing to pay somewhat higher prices for products from companies that don't pollute.
- Do not tolerate substandard, unsafe or misadvertised products. Return them to the retailer.
- Call the local library for names and addresses of companies you want to write (with either a compliment or complaint). They'll be in *Who's Who, Dun & Bradstreet, Contacts Influential,* and annual stock reports.
- Don't buy furs of endangered species for example, spotted cats, tigers, alligators.



## **Be A Thoughtful Housekeeper**

- Don't use colored household papers of any kind facial tissues, paper towels, toilet paper. The paper dissolves but the dye stays on, polluting soil and water.
- Don't let the water run indefinitely when brushing teeth, washing hair, washing dishes, etc. Put bricks in the tank of your toilet so it uses less water when flushed. Cut down on shower time.
- Avoid food waste. Prepare only enough food for each meal. Feed suitable leftovers to pets, thereby cutting down on purchase of canned pet food. Keep other leftovers well covered and use them promptly.
- Baking soda and a non-chemical scouring pad are good cleaning agents.
- Front loading washing machines use less water and soap.
- Avoid aerosol containers. They pollute the air in your house, they can explode, and they're hard to dispose of.
- Buy shampoo, lotions, etc., in glass, rather than plastic containers, or in large containers, re-using small containers.
- Avoid using "no-pest" strips and plastic flea collars. They contain dichlorovapone — nerve gas — and the Department of Agriculture has warned against their use where food is served, or in rooms where there are infants or elderly people.
- ✓ Don't use the toilet as a trash basket. Sewage treatment plant operators say some things must be hand-sorted or they make the

pumps break down. These include: rags, paper towels, disposable diapers, plastic combs and toothbrushes, tampon cylinders. In addition, trash dumped in the toilet bowl often leads to expensive repairs.

- Prevent indoor air pollution by using an exhaust fan or range hood. Use charcoal for barbecueing only.
- Be sure the mixer in your gas or oil furnace gets sufficient outdoor air or it will consume indoor oxygen (symptom — that dopy feeling!).
- Use household cleaners like chlorine bleach or ammonia properly
   improper use causes noxious gases.
- Use latex-base or water-base paints. Solvent-base paints contribute hydrocarbons to the smog.
- Use wood in your fireplace, not coal coal causes air pollution. Do not burn leaves, trash or garbage in the fireplace.

## **Cut Down on Electric Power Use**

Power plants use fossil fuels, thereby polluting the air. They are also a source of thermal pollution and with the coming use of nuclear energy, they'll be radiation polluters, too. We don't need nearly as much electricity as we think we do.

- Cut down on the use of frivolous appliances. Do you really need electric carving knives, can openers, toothbrushes, frypans, etc.? Good quality hand items will do the same job.
- Avoid running the dishwasher, washing machine, and dryer at

peak hours of water and electricity use -5:00 to 7:00 p.m. Run the dishwasher only when it's full.

- Turn off lights in unoccupied rooms.
- ✓ Avoid overuse of air conditioners. Proper planning of day and night ventilation is often enough. In a heat wave, you can cool even without an air conditioner by airing the house at night, keeping windows and doors closed and curtains drawn all day.

### **Stop Washday Pollution**

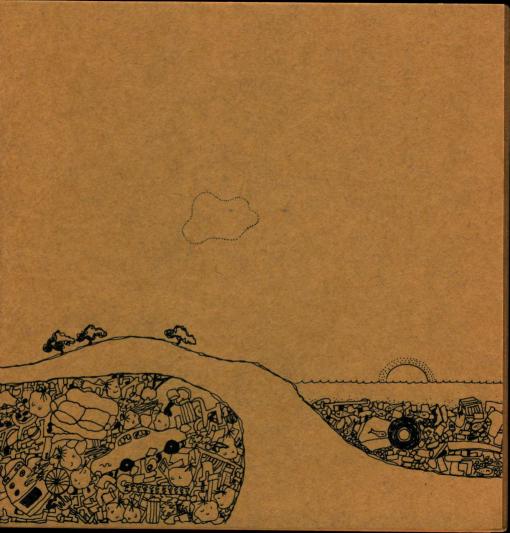
Do you remember the puffs and drifts of foam that were a common sight on urban and suburban waterways several years ago? That was detergent foam, caused by wetting agents that did not biodegrade or decompose easily in sewage treatment plants. In 1964, a U.S. law forced all manufacturers to switch to completely biodegradable organic parts in detergents.

Now a new washday magic is happening. Not only can detergents get your clothes shiny-bright, they can also turn a living lake into a swamp.

What's doing it is the phosphate content. This is a nutrient which promotes the growth of water plants. Too much phosphorus leads to an overgrowth of algae, that smelly green scum you see in stagnant water. This removes oxygen from the water, kills important, necessary water life and turns the body of water into a swamp. This process is called eutrophication and when the process speeds up, a body of water can be "killed" in just a few years. Examples are easy to spot. New York's Lake Onondaga is almost dead, well on its way to being a bog. Lake Erie is dying. The Potomac and Hudson Rivers are green and smelly. The future for all our waterways looks pretty bleak.

Our detergents contribute 40%-70% of the phosphates entering sewage treatment systems. Individual action by a few consumers is not going to be enough to make manufacturers change their ways, but there are some things we can do now.

- Demand that your state government ban the sale of laundry detergents containing phosphates in any quantity.
- ✓ Stop using enzyme pre-soaks right now. They contain ⅔ phosphate.
- Ask the Federal Trade Commission to require ingredients to be listed on detergent labels.
- ✓ Go back to soap. A combination of <sup>1</sup>/<sub>3</sub> cup of Arm and Hammer washing soda, added as the washing machine is filling, and 1<sup>1</sup>/<sub>2</sub> to 1<sup>2</sup>/<sub>3</sub> cups laundry soap, will do a good job on moderately soiled clothes — if your water is soft. In hard water, add <sup>1</sup>/<sub>4</sub> cup washing soda to the first rinse. For best results, presoak laundry for three hours in warm water and 4 tablespoons of washing soda.
- Don't use commercial packaged water softeners. Their phosphate content runs as high as 85%.
- Buy phosphate-free or low-phosphate detergents. Sears has a phosphate-free detergent and others will soon be available.



- Several direct-distribution products are low in phosphate content
   for example, Shaklee, Bestline, and Amway.
- ✓ Watch Consumer Reports and your local newspaper for upto-date lists of detergents and phospate contents.

# **Teach Your Children**

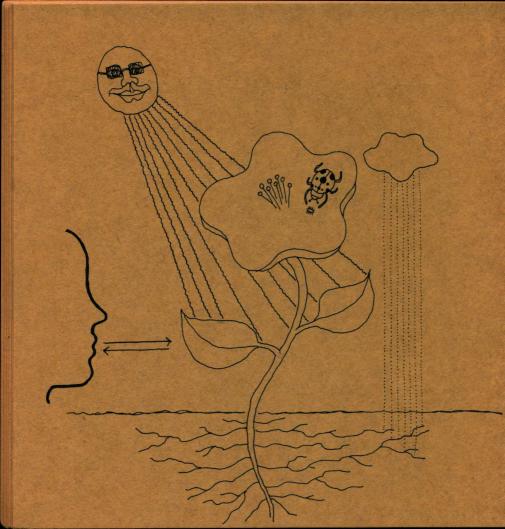
The survival of the human race depends on the environmental awareness of our children. They're going to have to live in this world for the rest of their lives and we must teach them how. Their lives depend on it.

- Set an example at home. Give them books on environmental subjects, watch for conservation specials on TV, take them to movies about conservation and ecology.
- Ask for conservation units and workshops to be taught in the school. Volunteer your knowledge and assistance.
- Encourage your children to raise pets and plant gardens.
- Take your children on picnics, to beaches, zoos, and the wilderness to introduce them to nature.
- Don't allow littering or irresponsible specimen collecting.
- Suggest conservation projects for youth and church groups your children belong to.
- Use lunch boxes instead of paper bags.
- Insist on better quality of toys. Poor quality indoctrinates children with throw-away, disposable attitudes.

Stop the ferry service. Encourage your children to walk or ride a bike. It's better for them and the air they breathe.

## **Other Suggestions**

- Get a live Christmas tree and replant it in your yard. If you are apartment bound, donate it to the city or the neighborhood school.
- Give conservation books, subscriptions, or club memberships as gifts. Give presents that are ecologically oriented. Make your own Christmas cards or buy cards which support your favorite cause. Avoid buying gifts with excess packaging.
- Don't use suntan or body lotions when swimming in natural bodies of water.
- ✓ Stop smoking. It pollutes the air.
- Drain oil from automobiles, power mowers, snowplows, etc., into a large container and empty it at the dump. Don't pour it down the street sewer—it pollutes the water and fouls up the sewage treatment plant.



# WHAT YOU CAN DO IN YOUR GARDEN

A green and growing garden is good for your soul, whether it's on a window sill or in the back yard. Best of all, it puts oxygen back into the air. We can and must learn to garden organically without chemicals — the wholesale poisoning of our land and ourselves has resulted from their overuse.

### Be An Organic Gardener

- Plant a variety of plants in your garden. Different plants encourage different insect forms, some being predatory to others.
- Stick to plants grown easily in your area.
- Feed plants well with organic fertilizers your own compost, cow manure, fish emulsion. Use commercial fertilizers only if you must, and follow the directions carefully. Healthy plants resist attack more successfully.
- ✓ Water your garden well and often. Be sure water goes where it's needed. Don't let it run off down the gutter. Use a kitchen timer to remind you when to turn the water off.
- ✓ Used coffee grounds and tea leaves are good soil conditioners, especially for heavy clay soil.
- Cow manure is an excellent fertilizer. You can cut down on odor by really soaking it into your lawn or plants. Beware of the dehydrated, packaged kind that often contains damaging quantities

of salts.

Try fertilizing from your own compost pile.

Cottonseed meal and bonemeal are good sources of nitrogen and phosphorus. Wood ashes from your fireplace contain needed potassium.

### **Build Your Own Compost Heap**

A well constructed compost heap is a garden treasure. Worked in well, compost lightens the soil and adds organic material, thereby returning some of the nutrients the plants have taken away. It holds moisture and is a fine mulch.

- ✓ A compost heap should be in a more-or-less permanent place, close to water and easy to get to, also attractively shielded from the sight of the house, if possible.
- ▶ Put anything on the pile that was once living material; weeds, hedge clippings, sawdust, coffee grounds, tea leaves, dead plants, pet deposits, fishbones, etc., but no bones or meat scraps. Add a few handfuls of lime or fertilizer, cover with a layer of manure and then with a layer of soil, and then soak it well. Turn the pile about once a week, keep it about as wet as a squeezed sponge and covered with soil. Adding a few earthworms will help to increase decay. It should decompose thoroughly in 3 to 12 months, although warm summer weather will hurry it up.

It should be rectangular with vertical sides to give maximum fer-

mentation, and flat-topped so the rain will soak in. A fence corner can provide two sides of a compost bin.

- Garden soil analysis will tell whether and which nutrients should be added to the compost heap.
- You can use charcoal, gravel, branches, or even a pipe for drainage at the bottom of your compost heap.
- ✓ You can make a simple compost heap with leaves, grass clippings and vegetable scraps. Mix ½ leaves, ¼ manure and ¼ topsoil with some limestone and bonemeal.
- Dig a hole in the back yard 3 feet by 4 feet by 12 inches. Add kitchen scraps and leaves. Keep the heap moist and covered with a light layer of soil.
- Don't use diseased plants in your compost.
- A larger compost bin can be made of scraps of lumber with slatted sides for aeration. You'll need four sides and bottom drainage.
- ✓ You can make a smaller amount of compost in a trash can with the bottom rusted out. Poke a few holes in it for aeration.

#### **Try Non-Poisonous Pest Controls First**

- Water-blast aphids, leafhoppers, and spittle bugs off your plants. Use any spray device strong enough to knock the bugs off, and be sure you do the underside of the leaves. Must be done every morning.
- Some natural predators can be purchased. You can buy ladybugs

and lacewing larvae for aphids; preying mantis for aphids, whiteflies, spidermites; and trichogramma wasps for cabbage loopers and other caterpillars. Write for prices to Pyramid Nursery, Box 5270, Reno, Nevada 89503; or Rincon Insectary, 1462 Callens Rd., Ventura, Cal. 93003.

- Dormant oil spray kills by smothering insects, eggs, or larvae. Oil spray (emulsive type spray for home garden use) will smother almost any over-wintering pest life on contact. Use on all deciduous trees and shrubs except apricots. Follow the exact proporportions on the label.
- To control mosquitoes: in early spring, drain any containers with water; change bird baths; fill in holes of trees with cement or sand; spray any standing water with kerosene or diesel fuel.
- There are several brands of metaldehyde without arsenic you can use as a non-poisonous bait for snails and slugs. Putting stale beer in a shallow dish attracts slugs and snails during the night. In the morning, put them in a used coffee can, put the plastic lid on tightly, and put it in the trash. Or put them in your compost heap.
- Sprout garlic or chives indoors, then plant it beneath your rose plants to ward off aphids.
- Planting marigolds within a 3-foot radius of plants susceptible to attack reduces or eliminates nematodes, a kind of microscopic worm that injures plants directly by its feeding. Insects don't like the smell of marigolds either.

Encourage lizards, toads, snakes, and salamanders by placing two

or three flat boards or pieces of driftwood on the ground in your yard. These reptiles eat slugs, snails, centipedes, sowbugs, crickets, beetles, aphids, termites, ants, and others.

✓ Set traps for small rodent pests, not poisons.

- Don't kill spiders (except Black Widows)—they eat many insects.
- Bantam chickens and ducks eat earwigs, little slugs, and leaf miners.
- Kitchen herbs, usually strong-smelling, can be used as insectrepellent plantings, including basil, coriander, mint, rosemary, sage, savory, and thyme. They are an attractive addition to your garden.
- Keep seed and water in your garden continually for wild birds. Plant trees and shrubs that will attract them. They will eat a surprising number of insects.
- Pull or hoe weeds instead of applying herbicides, especially those containing 2,4-D and 2,4,5-T.
- You can kill weeds near sidewalks and driveways by pouring boiling water on them.
- Don't get upset by a few insects and insect holes in your plants and fruits. If home gardeners would accept a little less than perfection, they shouldn't have to use chemical pesticides at all.

### **Natural Pesticides Are Generally Safe**

Pyrethrum, rotenone, hellebore, and ryania can be used on aphids,

leafhoppers, thrips, whitefly, caterpillars, Diabrotica, and houseflies. (Houseflies need a pyrethrum spray.) They are effective and do not persist.

- Sunset Magazine says that nicotine sulfate, although a botanical insecticide, is extremely toxic to humans and is best avoided.
- For control of ants, use ant stakes. They are reasonably safe since they are not sprayed into the atmosphere, but they do contain .46% arsenic trioxide and so should be kept away from pets and small children.
- Be sure to wash all fruits and vegetables that have been sprayed with natural poisons.
- Since Silent Spring suggests these pesticides for home use: 1. Bordeaux mixture, if not fortified with lead or calcium arsenate; sabadilla; sulfur, lime-sulfur — highly toxic but non-persistent, must be handled with great care to avoid human poisoning. 2. Bacterial insecticides like Bacillus thuringiensis for moths; Berliner; milky spore disease for Japanese beetle grubs. 3. Desiccants like selica aerogel; Dri-Die and Drione (with pyrethrum); diatomaceous earth. 4. Rodenticides like the anticoagulant, Warfarin, and red squill must be kept locked away from children and pets.

# **Avoid Synthetic Insecticides**

These are the least safe and should not be used in home gardens. They are not specific as to the target insect, and some insect pests may be growing resistant to them.

- Dibrom is highly toxic and carries a warning statement on its label.
- Malathion has been used indiscriminately, resulting in an overkill of good and bad insects, and fish.
- Other insecticides in this group not advocated for home use by Since Silent Spring are: organophosphates like diazinon, chlorthion, dimethoate, parathion, phosdrin, schradan, TEPP, and ENP; carbamates like carbaryl, methyl carbamate herbicides; and fungicides like captan and folpet.

### **Never Use The Chlorinated Hydrocarbons**

These are the killers that accumulate in body and soil, are extremely dangerous polluters to our planet. These chemicals decompose very slowly and high concentrations accumulate rapidly in the food chain. Also they kill bees and other helpful insects which are your natural pest controls.

- They are DDT, Aldrin, Chlordane, DDD, Methoxychlor, Endrin, Dieldrin, Lindane, Heptachlor, Kelthane, Tedion, Thiodan, Toxaphene, Cygon and other related chlorinated hydrocarbons.
- There is still no official way of getting rid of DDT and the others you may have in your home. (Sunset Magazine and others say that the best present way to get rid of them is to use the remainder when needed, as directed on the label.) Don't, above all, throw

them into the sewer or flush them away.

- The Connecticut Agricultural Experimental Station has devised a way of ridding the soil of hard pesticides. Mix powdered activated charcoal thoroughly into the soil; the molecules are adsorbed in the charcoal's many microscopic pores and held so as to become non-existent in the soil.
- Do not use any products containing lead, arsenic, or mercury. These elements do not biodegrade and do not go away. They poison people and animals by slow accumulation.
- Support laws to ban the sale and use of DDT and the other chlorinated hydrocarbons.

### **Be Careful When You Spray**

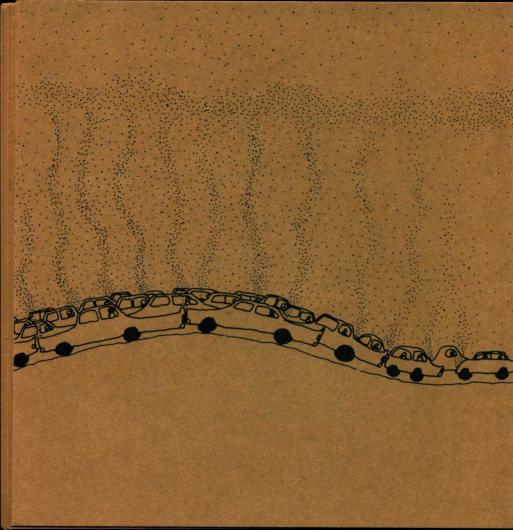
- ✓ Use any spray only if a plant is being damaged by insects, mites, or diseases. Do not spray preventively.
- Study the "active ingredient" list which legally must be printed on all containers plus the "other active ingredients." If you are not sure, don't buy. Some companies deliberately try to confuse you.
- ✓ Use too little spray, rather than too much.
- ✓ Use clean spray equipment, rinse it thoroughly after using it, and don't return measuring utensils to the kitchen.
- ✓ Powder is less harmful to you than spray.
- Spray when the air is still, and wear a mask.
- Do not use hose-end sprayers. They put on too much, too fast, in

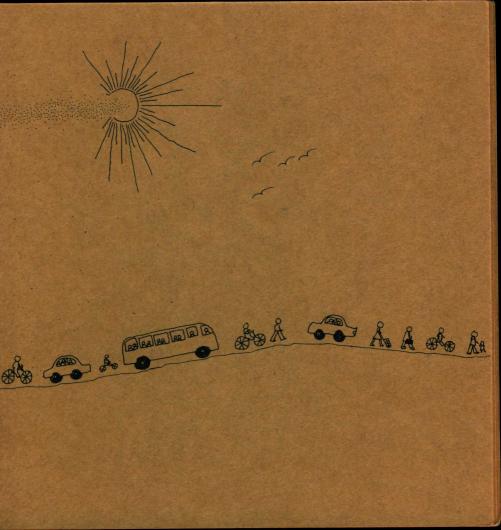
too-large droplets and the overshoot contaminates the soil. Use a portable pressure sprayer or aerosol bomb.

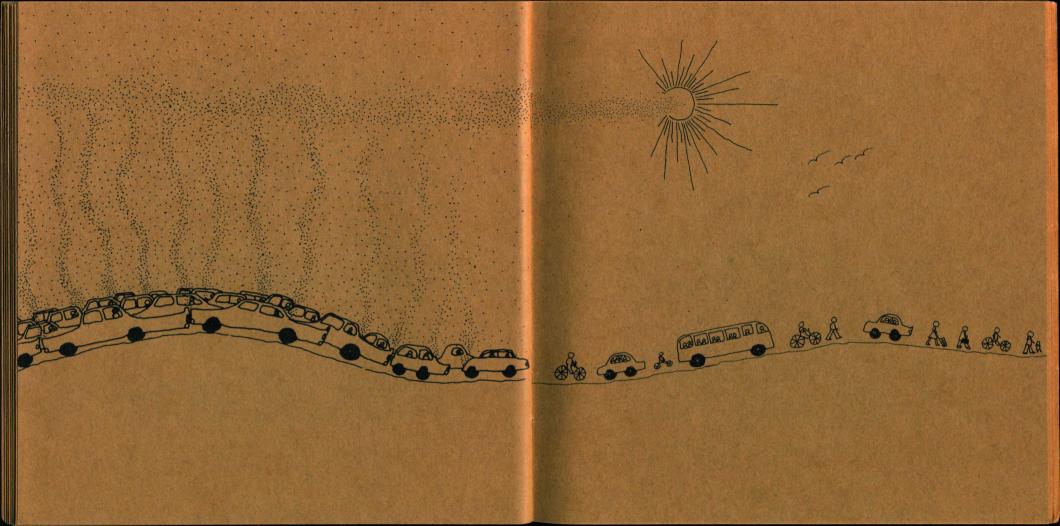
Buy the smallest can, bottle, or package you can get. You will need only 1 or 2 tablespoons at a time.

## **General Garden Tips**

- If you have a gardener or use a spray service, ask what he uses as a pest control. Don't permit the use of the chlorinated hydrocarbons, lead, or arsenic.
- ✓ Find out what your city sprays on planted spaces, what school maintenance people spray on school grounds.
- ✓ Use a hand mower. Gas pollutes the air.
- Never use "Piggyback Specials" such as fertilizers plus weed killers plus insecticides, all in one package.
- When buying seeds, reject those that have been treated with pesticides such as mercury for a fungicide or a chlorinated hydrocarbon for an insecticide.
- Consider a container garden for small yards. Paint an old metal container a bright color, cut a hole in it for drainage, fill it with compost, add some soil, and plant your seeds.
- Don't use plastic bags for garden trash. Since they don't decay readily, they are a huge disposal problem, also a pollution problem when they are produced.







# WHAT YOU CAN DO IN YOUR COMMUNITY

You have almost as much influence in your neighborhood as in your home. Here is where local action should begin, among people who know you and will listen. Only by organized action can we clean up the mess we've made.

## Look For Better Ways To Get There

Almost any other way of transportation is better and healthier for you and your world than a car. They are the leading producers of air pollution.

- Support public transportation. Insist on frequent schedules and well-designed vehicles. Realize its economic problems, too.
- Use your car as little as possible. Ride a bicycle or walk or form a car pool.
- Try to get along with one car in the family.
- Request establishment of bike trails or lanes, separate from car traffic, and placement of more bicycle racks in shopping centers.
- Keep your car tuned to the manufacturer's specifications. Be sure your air pollution control device is in top condition.
- Don't let the gas station attendant "top off" your tank. Don't overfill your gas tank. Vapors from spilled gasoline pollute the air and waste petroleum, a non-renewable natural resource.
- Don't let your car idle excessively—it uses more gas then.
- Write to car manufacturers, petroleum companies, auto clubs,

and legislators, stating your opinions about the air pollution caused by cars.

- Support the use of the gasoline tax money for other things than highways only—rapid transit, pollution control, beautification.
- Avoid the excessive use of mechanical recreation—power boats, snowmobiles, dune buggies, trail bikes.
- Convert your car to propane.
- ✓ Use low-lead or lead-free gasoline, if possible.
- Promise yourself you'll buy the next car with substantially lower polluting exhaust emissions.

### **Keep Your Part of America Beautiful**

- Identify community and regional assets that must be preserved and enhanced: landmark trees, homes, open space, virgin forest, beaches.
- Complain to advertisers and stores about their use of unsightly billboards. Write to your legislator about them.
- Become acquainted with community ordinances and codes on pollution control, building quality, zoning, beautification standards.
- Encourage your community to set apart small nature preserves places to communicate with nature; also neighborhood parks, green belts, regional parks.
- Find out whether your community has programs for landscaping of freeways, roadsides, shopping centers.

- Identify blighted areas in your community—stream, lake, or junkyard—and begin bothering the people responsible. Publicity is very effective—your local newspaper might do a feature series.
- Always carry a litter bag in your car or boat and do your own small clean-up campaign as you go along.
- Encourage local businesses to plant and landscape their property.
- When hiking, don't break branches or pick flowers and don't let your children do it either. Look, don't destroy.
- Get your neighbors involved.
- Support a law that would allow a percentage of the purchase price to be refunded to you when you turn an old car in to a junk dealer. Junked cars are an eyesore on the road.

### **Start A Community Project**

- Join a consumer organization to learn more about consumer buying practices and problems.
- Form an environmental or conservation committee in your own club.
- Be involved where you feel most effective in promoting your social and political concerns—PTA, home owners associations, League of Women Voters, American Association of University Women, etc.
- Encourage these money-raising ideas for Boy and Girl Scout projects: collecting aluminum cans, rags, bottles, paper, glass.
- Find out about the insecticides and herbicides being used by your

city and school. Make recommendations to the city or school based on your research.

- Organize the collection of discarded items that can be used by nursery or elementary schools, such as egg cartons, spools, lumber scraps, greeting cards, cardboard, etc. Find out how much they need, how often, etc. Day care centers and Head Start can use these items, too.
- Present ecology displays (recycle and re-use ideas) at shopping centers, malls, etc.
- Organize a clothing drive. Many charities have re-sale shops. Or sell the collection to a second-hand dealer and donate the money to your favorite charity.
- Organize a beach, park, or walk clean-up. These are fine projects for scouts and children's groups. Get your neighbors together for a clean-up of an empty lot or a messy yard.
- ✓ Start a tree-planting campaign. Trees return oxygen to the air.
- Through garden clubs, etc., raise funds to send local teachers and/or students to summer forestry and conservation camps.

### **Stop The Noise**

City people begin to lose their hearing at age 30—it used to be age 70. And for the acid rock generation with their amplifiers, it's age 22.

According to scientists, human hearing begins to be damaged by

prolonged exposure to more than 85 decibel sounds. Loud noises can increase body tension, which affects blood pressure, heart, and nerves.

Here's a short decibel count. Subways are 90-plus, power mowers are over 100, construction equipment is 110, jet take-off is 120, and sirens are 130.

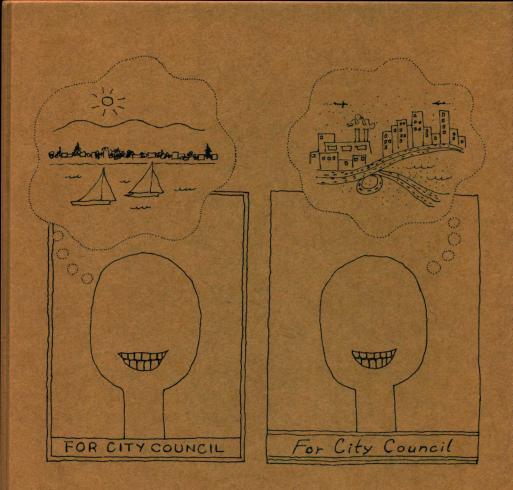
Are you listening?

- Try to muffle household noises: power tools, motor bikes, power mowers, radios, and stereos.
- Don't play radios in public areas where they will annoy others.
- Report noisy cars, motorcycles, and minibikes to the Highway Patrol.
- Ask your city government to make and enforce anti-noise ordinances.
- Write to manufacturers about extra-noisy appliances, machines.
- Complain to your Congressman about aircraft noise.
- Don't give up the fight against the super-sonic transport plane. Several countries have already banned it from flying over them. Its sonic boom will affect an area 50 miles wide for the entire length of the flight. The take-off noise of its prototype will produce over 100 decibels for 13 miles in either direction.

#### **General Suggestions**

Get after junk mail—it's wasteful and annoying. Return it to the sender in another envelope, postage due. Or collect a week's junk mail and send it to your Congressman or Senator with an accompanying letter demanding an end to it. On first class mail when return postage is guaranteed, write "refused" and sign your name on the front, and remail it. Repackage 3rd class "bulk rate" in another envelope and mail it back, postage due.

- Demand an end to the sale of mailing lists.
- Call the business office of the telephone company and tell them you want your name deleted from the commercial directory.
- Find out about your community's water supply and sewage treatment facilities, and local government's attitudes and programs.
- ✓ If you have a camera with self-developing film, carry a litter bag for the scraps. The emulsion left on the scraps is highly poisonous, pollutes streams into which the film blows, and kills the hoofed animals, who seem to like to eat it.
- Encourage libraries to have conservation displays and to buy books on ecology for children and adults.
- Donate a conservation magazine to your local or school library.
- ▶ Be willing to buy second-hand items.
- Establish direct communication with other groups interested in conservation—neighbors, co-workers, clubs, etc. Promote cooperation—the more people you have, the more influential you are.
- ✓ If you own a boat, be sure it has a chemical toilet. When you're out on a boat, don't throw wastes overboard. Put beer can tabs in the can—fish and birds often mistake them for small fish.



# WHAT YOU CAN DO IN YOUR GOVERNMENT

"There will be no change in the environment without first enacting legislative change," says John Zierold, who represents 70 conservation groups in California's state capital of Sacramento.

You can't do it singlehanded. If you care about your environment, you must not only act as an individual, you must also unite to tell your lawmakers what you want.

### **Get Involved In Local Action**

- Know what's going on in your own community. Your vote counts for more here than anywhere else.
- Get interested and work on local conservation issues.
- If you sign a petition or form letter, follow it up with a letter written in your own words.
- Attend meetings of the Board of Supervisors, the City Council, the Planning Commission, etc.
- Write letters to your city government, your local newspaper, and don't forget to compliment as well as complain.
- ✓ Work with local citizens' groups on pollution control. Let them use your name, your money, and most of all, your time.

#### **Become Interested In Politics**

Inform yourself on the issues. Listen to and study both sides. What seems a simple solution may not be at all when you understand the whole problem.

- Support conservation proposals that call for positive action, like new laws to protect the shoreline, not just negative action like big fines for polluters.
- Study a specific problem thoroughly (such as water pollution or pesticides) and let others share your knowledge. Legislators are looking for this kind of information.
- Present your arguments before formal hearings are held. Environmental problems are new in politics and they must be patiently and politely explained to the lawmakers.
- Do not hesitate to tell your friends why you oppose a certain piece of legislation. They have votes too.
- Support candidates who agree with you on conservation and insist that they match their speeches with action.
- Keep a chart or record of politicians' statements and action.
- Don't forget to listen to the opposition. You need to know what it is saying.
- Work actively for the political party of your choice, as precinct worker or chairman, passing out literature, registering voters.
- Publicize legislators' actions as a bill proceeds.

### Write to Your Lawmaker

Your assemblyman, representative, or senator wants to know what you think. He keeps in touch as closely as possible with voters in his state or district. He pays very close attention to his mail. So, if you have something important to say to him, write. One way or another, he'll answer. He wants your vote.

- Address your Congressman properly. Use his title, full name, and spell them correctly.
- Write legibly or type, in your own words, on your own stationery. Include your address and sign your name legibly, so that he can answer you.
- ▶ Be brief. Discuss one issue only in a letter.
- Pick the right time to write. Write early in the session if you have strong feelings about an issue. Write when hearings start to support a special bill. Identify it by number or title.
- Include local editorials or clippings with your letter. Or send them to your legislator with a short note if they illustrate something you're interested in.
- Keep a supply of postcards for quick notes.
- State reasons for your position how the bill will affect you, your business, your community.
- ✓ Write to the chairman or members of the committee considering the bill you're interested in — but remember you have the most influence with your own representative.
- ✓ Write and tell him if you approve what he's doing.
- Don't be rude, threatening, or vague.
- Don't send carbons. Write an individual letter to each Congressman — they're much more effective.

### **Use The Correct Form For Letters**

The correct salutation and closing for letters to officials are as follows:

President of the U.S.

The President The White House Washington, D.C. 20500 Dear Mr. President: Very respectfully yours,

Vice-President

The Vice-President United States Senate Washington, D.C. 20510 Dear Mr. Vice-President: Sincerely yours,

### Senator

Senator United States Senate Washington, D.C. 20510 Dear Senator: Sincerely yours,

# Representative

The Honorable \_\_\_\_\_ House of Representatives Washington, D.C. 20515

Dear Mr.\_\_\_\_\_ Sincerely yours,

## Cabinet Member

The Honorable\_\_\_\_\_ The Secretary of\_\_\_\_\_ Washington, D. C. 20520 Dear Mr. Secretary: Sincerely yours,

# **STOP OUR POPULATION GROWTH**

At the root of all our environmental problems stands one great problem — runaway population growth. Air polluted by too many cars, water poisoned by sewage discharge, land filled with garbage that won't decay — it all comes from too many people.

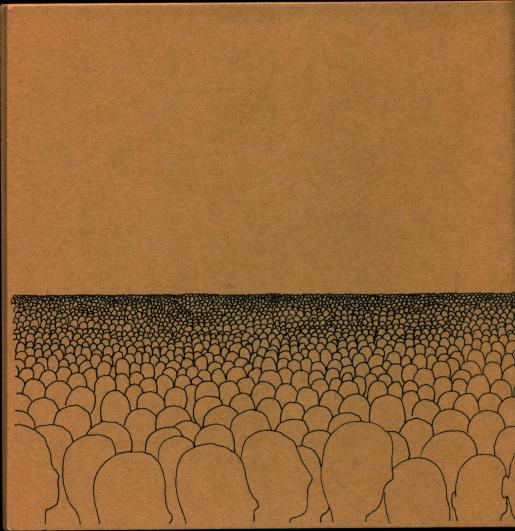
And it's going to get worse. Current population projections say the world will have 7 billion people by the year 2000, or double the present population of 3.5 billion. Scientist Barry Commoner believes that under present conditions the earth can support between 6 billion and 8 billion people. After that, environmental and food-supply problems may become insurmountable (*Time*, February 2, 1970).

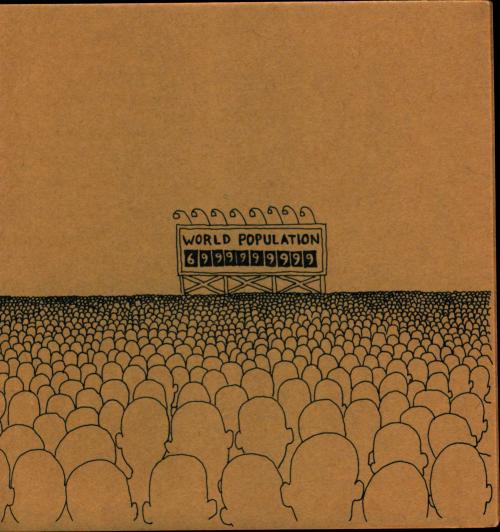
Consider what it would mean for the population of a country to double in 30 years. The food available must double. The supply of water must double. Buildings, roads, power supply — all must double. It would be fantastically difficult for the United States to do, let alone an undeveloped country in Latin America or Africa, with their "rising expectations."

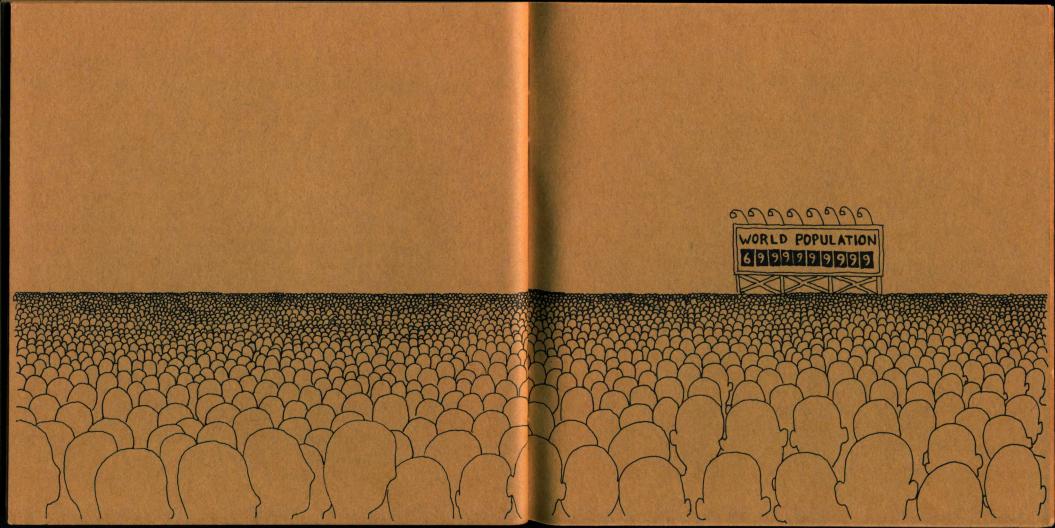
According to Professor Paul Ehrlich, writing in *The Environmental Handbook*, "Basically, then, there are only two kinds of solutions to the population problem. One is a 'birth rate solution,' in which we find ways to lower the birth rate. The other is a 'death rate solution,' in which ways to raise the death rate — war, famine, pestilence — find us. The problem could have been avoided by population control, in which mankind consciously adjusted the birth rate so that a 'death rate solution' did not have to occur."

Remember. The year 2000 is only 30 years away.

- Limit your family size to 2. This will reproduce you and your husband, thus stabilize the population. If you want more, adopt.
- Support the widest distribution of birth control information, increased research into improved methods.
- ✓ Support laws to make abortion legal and inexpensive.
- Support population control organizations such as Planned Parenthood and Zero Population Growth.
- ✓ Support sex education at all appropriate levels, stressing birth control practices and the need to stabilize population.
- Ask the government to sponsor a campaign for population control in the media like the present anti-smoking campaign.
- ✓ Ask the government to offer annual bonuses for childless couples and eliminate tax deductions for more than two children.
- Demand massive federal aid to supply birth control information, planning, and materials to all countries that will accept it.
- ✓ Ask the government to give foreign aid only to countries with major programs to curb population growth.
- Tell the population facts to people who should know them.
- Remember that human beings are too important to be biological accidents and that every child born has a right to be welcome and a right to a decent life.







# WHERE TO GET MORE INFORMATION

### Join a conservation organization

This month, join a group concerned with population problems, for example:

Planned Parenthood, 515 Madison Ave., New York, N.Y. 10022

Zero Population Growth, 367 State St., Los Altos, CA 94022

Next month, join a group concerned with national problems, for example:

Friends of the Earth, 30 E. 42nd St., New York, N.Y. 10017 National Audubon Society, 1130 Fifth Ave., New York, N.Y. 10038

National Parks Assn., 1701 18th St., N.W., Washington, D.C. 20036

National Wildlife Federation, 1412 16th St., N.W., Washington, D.C. 20036

The Nature Conservancy, 1522 K St., N.W., Washington, D.C. 20005

Sierra Club, 1050 Mills Tower, San Francisco, CA 94104 The Isaak Walton League of America, 1326 Waukegan Rd., Glenview, Ill. 60025

The Wilderness Society, 729 15th St., N.W., Washington,

### D.C. 20005

Other such	organizations a	s American	Assn. of	University
Women,	League of Wome	en Voters, yo	our local ga	arden club.

A more complete list of organizations can be obtained from *Ecotactics* or the 1969 Conservation Directory of the National Wildlife Federation.

The third month, join a group concerned with local problems: California Tomorrow, Monadnock Bldg., 681 Market St., San Francisco, CA 94105

Committee for Green Foothills, P.O. Box 11511, Palo Alto, CA 94301

Ecology Center and/or Ecology Action.

New Mexico Citizens for Clean Air and Water, 113 Monte Rey Dr., N., Los Alamos, N.M. 87544

Planning & Conservation League, 909–12th St., Sacramento, CA 95814

Many of the national organizations have local branches — check the telephone book, the library, or the Chamber of Commerce.

## Read these books.

 Silent Spring, Rachel Carson, Fawcett World, \$.95.
 Science and Survival, Barry Commoner, Viking, \$1.35.
 The Environmental Handbook, ed. by Garrett De Bell, Ballantine/Friends of the Earth Book, \$.95. The Population Bomb, Paul Ehrlich, Ballantine, \$.95.

Since Silent Spring, Frank Graham, Jr., Houghton-Mifflin, \$6.95. Ecotactics: The Sierra Club Handbook for Environmental Activists, ed. by Stallings and Mitchell, Pocket Books, \$.95. (This contains an excellent bibliography.)

The Frail Ocean, Wesley Marx, Ballantine, \$.95.

Our Plundered Planet, Fairfield Osborn, Little, Brown, \$1.95.

Moment in the Sun, Leona and Robert Rienow, Ballantine-Sierra Club, \$.95.

The Living Landscape, Paul B. Sears, Basic Books, \$4.95. The Last Landscape, William H. Whyte, Anchor, \$1.95.

## ▶ Read these magazines.

Audubon. Consumer Reports. Cry California (California Tomorrow publication). Environment. Living Wilderness, The National Geographic. Natural History. Ranger Rick (Nat. Wildlife Fed. magazine for children). Sierra Club Bulletin. Sunset Magazine.

## Afterword

This handbook has been an answer to the question, "But what can I do about the environmental crisis?"

Citizens can do a great deal. In our homes, in our gardens, in our communities, and in our government, we can work alone and together if we will.

But we must want to. We must realize what we have done and are doing to destroy our world.

And we must start now to change our life styles. Some scientists say we may only have one generation to clean things up. After that, we are finished as a species. Our world will be unlivable.

It won't be easy to change. We must all do the things suggested in this book — and keep on doing them. We must stop over-consuming. We must get ourselves and our friends involved. We must fight polluters with our votes.

We must learn to live, not as masters any more, but as just another species on our planet, quite probably the only one we'll ever be able to live on. "We celebrate the nourishing Earth, our home and the abode of our children forever."

> Celebration for a Small but Important Planet by Harold Gilliam San Francisco Chronicle, April 19, 1970

# FOR YOUR LOCAL INFORMATION

Please complete this list with names, addresses and phone numbers that pertain to your locality.

#### ✓ Your Government:

(See page 40 for suggestions for how to write to them.) United States:

Senators:\_\_\_\_

Representative:	
State:	
Governor:	
Senator:	
Representative:	
Local:	
City Council:	the state of the state of the state of the

Planning Commission:

Board of Supervisors:\_\_\_\_\_

For bulk rates or additional copies, write to: Mrs. Howard W. Harrington American Assn. of University Women 774 Gailen Ct. Palo Alto, CA 94303

Air Pollution:         Water Pollution:         Noise Pollution:         Noise Pollution:         Where To Recycle:         Cans: Aluminum (pop-top, no side or bottom seam, rounded bottom, can be pinched with fingers, non-magnetic)         Empty, rinse, flatten.         Take to:         "Tin" (all steel, no aluminum, most foods are in tin cans)         Wash, remove labels, remove ends (keep with can), flatten.         Take to:         Bi-Metal (seam on side and bottom, aluminum pop-top)         Wash, flatten. AVOID — they're hardest to recycle.         Take to:         Glass (non-returnable bottles and jars)         Wash, remove labels and aluminum neck rings, separate by colors (clear, brown, green).         Take to:         Newspapers         Stack in bundles, keep separate from magazines.         Take to:	Report Po	ollution Violations To:
Water Pollution:	A CONTRACTOR OF A CONTRACT	
<ul> <li>Noise Pollution:</li></ul>		
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Stack in bundles, keep separate from magazines.	Г	ake to:
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