

ECOLOGY

(From "**Judaism and Global Survival**", Chapter 4 by Professor Richard H. Schwartz.
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In the hour when the Holy one, blessed be He,
created the first human being (Adam),
He took him and let him pass before all the trees of
the Garden of Eden and said to him:
"See my works, how fine and excellent they are!
All that I have created, for you have I created them.
Think upon this and do not corrupt and desolate My world,
For if you corrupt it, there is no one to set it right after you."

Midrash Ecclesiastes Rabbah 7:28

When God created the world, He was able to say, "It is very good." (Genesis 1:31)
Everything was in harmony as God had planned, the waters were clean, and the air was
pure. But what must God think about the world today?

What must God think when the rain He provided to nourish our crops is often acid rain,
due to the many chemicals emitted into the air by industries and automobiles; when the
ozone layer He provided to separate the heavens from the earth to protect all life on earth
from the sun's radiation is being depleted; when the abundance of species of plants and
animals that He created are becoming extinct at such an alarming rate in tropical rain
forests and other threatened habitats, before we are even been able to study and catalog
many of them; when the abundant fertile soil He provided is quickly being depleted and
eroded; when the climatic conditions that He designed to meet our needs are threatened
by global warming?

Consider the extreme differences between conditions at the time of creation and
conditions today:

* In the beginning God created the heavens and the earth. The earth was without form and void, and darkness was upon the face of the deep; and the Spirit of God hovered over the face of the waters. (Genesis 1:1-2)

In the beginning of the technological age, man recreated the heavens and the earth. To the earth he gave new form with dynamite and bulldozer, and the void of the heavens he filled with smog.

* And God said, "Let there be a firmament in the midst of the waters.... Let the waters under the heavens be gathered into one place, and let the dry land appear." (Genesis 1:6)

Then man took oil from beneath the ground and spread it over the waters, until it coated the beaches with slime. He washed the topsoil from the fertile prairies and sank it in the ocean depths. He took waste from his mines and filled in the valleys, while real estate developers leveled the hills. And man said, "Well, business is business."

* Then God said, "Let the earth put forth vegetation, plants yielding seed and fruit trees bearing fruit in which is their seed, each according to its kind, upon the earth.... Let the earth bring forth living creatures according to their kinds." And it was so. And God saw that it was good. (Genesis 1: 11, 24)

But man was not so sure. He found that mosquitoes annoyed him, so he killed them with DDT. And the robins died, too, and man said, "What a pity." Man defoliated forests in the name of modern warfare. He filled the streams with industrial waste, and his children read about fish... in the history books.

* So God created humans in His own image; in the image of God He created them. And God blessed them, and God said to them, "Be fruitful and multiply, and fill the earth and subdue it, and have dominion over... every living thing." (Genesis 1:27-28)

So man multiplied and multiplied -- and spread his works across the land until the last green blade was black with asphalt, until the skies were ashen and the waters reeked, until neither bird sang nor child ran laughing through cool grass. So man subdued the earth and made it over in his image, and in the name of progress he drained it of its life.... Until the earth was without form and void, and darkness was once again upon the face of the deep, and man himself was but a painful memory in the mind of God.¹

Today's environmental threats bring to mind the Biblical ten plagues that appear in the Torah portions which are read in synagogues in the weeks before the ecological holiday of Tu B'Shvat:

- * When we consider the threats to our land, waters, and air due to pesticides and other chemical pollutants, resource scarcities, acid rain, threats to our climate, etc., we can easily enumerate ten modern "plagues".
- * The Egyptians were subjected to one plague at a time, while the modern plagues threaten us all at once.
- * The Jews in Goshen were spared most of the Biblical plagues, while every person on earth is imperiled by the modern plagues.
- * Instead of an ancient Pharaoh's heart being hardened, our hearts today have been hardened by the greed, materialism, and waste that are at the root of current environmental threats.
- * God provided the Biblical plagues to free the Israelites, while today we must apply God's teachings in order to save ourselves and our precious but endangered planet.

JEWISH TEACHINGS ON ECOLOGY

Many fundamental Torah principles express and make concrete the Biblical statement, "The earth is the Lord's and the fullness thereof" (Psalms 24:1):

1. People are to be co-workers with God in helping to preserve and improve the world.

The Talmudic sages assert that the assigned role of the Jewish people is to enhance the world as "partners of God in the work of creation."² The following Psalm reinforces this concept:

When I look at Your heavens, the work of Your hands,
 The moon and work which you have established,
 What is man that You are mindful of him, and the son of
 man that You do care for him?
 Yet you have made him little less than God, and do crown
 him with glory and honor.
 You have given him dominion over the works of Your
 hands;
 You have put all things under his feet... (Psalms 8:4-7)

The Talmudic sages express great concern about preserving the environment and preventing pollution. They state: "It is forbidden to live in a town which has no garden or greenery."³ Threshing floors must be placed far enough from a town so that it will not be dirtied by chaff carried by winds.⁴ Tanneries must be kept at least 50 cubits (a cubit is about half a meter) from a town and may be placed only on the east side of a town, so that odors and pollution will be carried away from the town by the prevailing winds from the west.⁵

2. Everything belongs to God. We are to be stewards of the earth, to insure that its produce is available for all God's children.

There is an apparent contradiction between two verses in Psalms: "The earth is the Lord's" (Psalms 24:1) and "The heavens are the heavens of God, but the earth He has given to human beings" (Psalms 115:16). The apparent discrepancy is cleared up in the following way: Before a person says a *bracha* (a blessing), before he acknowledges God's ownership of the land and its products, then "the earth is the Lord's;" after a person has said a *bracha*, acknowledging God's ownership and that we are stewards to ensure that God's works are properly used and shared, then "the earth He has given to human beings."⁶

Property is a sacred trust given by God; it must be used to fulfill God's purposes. No person has absolute or exclusive control over his or her possessions. The concept that people have custodial care of the earth, as opposed to ownership, is illustrated by this ancient Jewish story:

Two men were fighting over a piece of land. Each claimed ownership and bolstered his claim with apparent proof. To resolve their differences, they agreed to put the case before the rabbi. The rabbi listened but could come to no decision because both seemed to be right. Finally he said, "Since I cannot decide to whom this land belongs, let us ask the land." He put his ear to the ground and, after a moment, straightened up. "Gentlemen, the land says it belongs to neither of you but that you belong to it."⁷

As we have discussed, even the produce of the field does not belong solely to the person who farms the land. The poor are entitled to a portion:

And when you reap the harvest of your land, you shall not wholly reap the corner of your field, neither shall you gather the gleanings of your harvest. And you shall not glean your vineyard, neither shall you gather the fallen fruit of your vineyard; you shall leave them for the poor and for the stranger; I am the Lord, your God. (Leviticus 19: 9 -10)

These portions set aside for the poor were not voluntary contributions based on kindness. They were, in essence, a regular Divine assessment. Because God is the real owner of the land, He claims a share of the bounty which he has provided to be given to the poor.

As a reminder that "the earth is the Lord's," the land must be permitted to rest and lie fallow every seven years (the sabbatical year):

And six years you shall sow your land, and gather in the increase thereof, but the seventh year you shall let it rest and lay fallow, that the poor of your people may eat; and what they leave, the animals of the field shall eat. In like manner you shall deal with your vineyard, and with your olive yard. (Exodus 23: 10, 11)

The sabbatical year also has ecological benefits. The land was given a chance to rest and renew its fertility.

Judaism asserts that there is one God who created the entire earth as a unity, in ecological balance, and that everything is connected to everything else. This idea is perhaps best expressed by Psalm 104:

... You [God] are the One Who sends forth springs into
brooks, that they may run between mountains,
To give drink to every animal of the fields; the creatures
of the forest quench their thirst.
Beside them dwell the fowl of the heavens;...
You water the mountains from Your upper chambers,...
You cause the grass to spring up for the cattle,
and herb, for the service of humans, to bring forth

bread from the earth...
How manifold are your works, O Lord! In wisdom You have
made them all; the earth is full of Your property...

Some people argue that people have been given a license to exploit the earth and its creatures, because God gave humans "dominion over the fish of the sea, and over the fowl of the air, and over every living thing that creeps upon the earth" (Genesis 1:28). However, the Talmudic sages interpret dominion as meaning guardianship or stewardship, being co-workers with God in taking care of and improving the world, not as a right to conquer and exploit animals and the earth.⁸ The fact that people's dominion over animals is limited is indicated by God's first (completely vegetarian) dietary regime (Genesis 1:29).

Rabbi Abraham Isaac Ha-Kohen Kook, the first Chief Rabbi of pre-state Israel, states that dominion does not mean the arbitrary power of a tyrannical ruler who cruelly governs in order to satisfy personal desires.⁹ He observes that such a repulsive form of servitude could not be forever sealed in the world of God whose "tender mercies are over all His work" (Psalm 145:9).¹⁰ God indicates the intended human role when he tells Adam and Eve that they are to work the earth and protect it (Genesis 2:15).

3. We are not to waste or unnecessarily destroy anything of value.

This prohibition, called *bal tashchit* ("you shall not destroy") is based on the following Torah statement:

When you shall besiege a city a long time, in making war against it to take it, you shall not destroy (*lo tashchit*) the trees thereof by wielding an ax against them; for you may eat of them. You shall not cut them down; for is the tree of the field man, that it should be besieged by you? Only the trees of which you know that they are not trees for food, them you may destroy and cut down, that you may build bulwarks against the city that makes war with you, until it fall.

Deuteronomy 20:19,20

This Torah prohibition is very specific. Taken in its most literal sense, it prohibits only the destruction of fruit trees during wartime. During Talmudic times, the rabbis greatly

expanded the objects, methods of destruction, and situations that are covered by *bal tashchit*.

Whoever breaks vessels, or tears garments, or destroys a building, or clogs a well, or does away with food in a destructive manner violates the prohibition of *bal tashchit*.¹¹

Early sages reasoned that if the principle applied even during a wartime situation, it must apply also at all other times. Similarly, they deduced that other means of destruction besides direct destruction with an ax (such as destroying trees by diverting a source of water) were also forbidden. Finally, they ruled by analogy that *bal tashchit* regulated not only trees, or even all natural objects, but everything of potential use, whether created by God or altered by people.¹² Talmudic rulings on *bal tashchit* also prohibit the unnecessary killing of animals¹³ and the eating of extravagant foods when one can eat simpler ones.¹⁴ In summary, *bal tashchit* prohibits the destruction, complete or incomplete, direct or indirect, of all objects of potential benefit to people.

The following Talmudic statements illustrate the seriousness with which the rabbis considered the violation of *bal tashchit*.

The sage Rabbi Hanina attributed the early death of his son to the fact that the boy had chopped down a fig tree.¹⁵

Jews should be taught when very young that it is a sin to waste even small amounts of food.¹⁶

Rav Zutra taught: "One who covers an oil lamp or uncovers a naphtha lamp transgresses the prohibition of *bal tashchit*"¹⁷ [Both actions mentioned would cause a faster (hence wasteful) consumption of the fuel.]

Maimonides makes explicit the Talmudic expansion:

It is forbidden to cut down fruit-bearing trees outside a besieged city, nor may a water channel be deflected from them so that they wither.... Not only one who cuts down trees, but also one who smashes household goods, tears clothes,

demolishes a building, stops up a spring, or destroys articles of food with destructive intent transgresses the command "you must not destroy."¹⁸

The *Sefer Ha-Hinukh*, a thirteenth century text which explicates the 613 mitzvot in detail, indicates that the underlying purpose of *bal tashchit* is to help one to learn to act like the righteous, who oppose all waste and destruction:

The purpose of this mitzvah [*bal tashchit*] is to teach us to love that which is good and worthwhile and to cling to it, so that good becomes a part of us and we avoid all that is evil and destructive. This is the way of the righteous and those who improve society, who love peace and rejoice in the good in people and bring them close to Torah: that nothing, not even a grain of mustard, should be lost to the world, that they should regret any loss or destruction that they see, and if possible they will prevent any destruction that they can. Not so are the wicked, who are like demons, who rejoice in destruction of the world, and they destroy themselves.¹⁹

Rabbi S. R. Hirsch, the leading Orthodox rabbi of nineteenth century Germany, viewed *bal tashchit* as the most basic Jewish principle of all -- acknowledging the sovereignty of God and the limitation of our own will and ego. When we preserve the world around us, we act with the understanding that God owns everything. However, when we destroy, we are, in effect, worshipping the idols of our own desires, living only for self-gratification without remembering God. By observing *bal tashchit*, we restore our harmony not only with the world around us, but also with God's Will, which we place before our own:

"Do not destroy anything" is the first and most general call of God... If you should now raise your hand to play a childish game, to indulge in senseless rage, wishing to destroy that which you should only use, wishing to exterminate that which you should only gain advantage from, if you should regard the beings beneath you as objects without rights, not perceiving God Who created them, and therefore desire that they feel the might of your presumptuous mood, instead of using them only as the means of wise human activity -- then God's call proclaims to you, "Do not destroy anything! Be a *mensch* [good human being]! Only if you use the things around you for wise human purposes, sanctified by the word of My teaching, only then are you a *mensch* and have the right over them which I have given you as a human. However, if you destroy, if you ruin, at that moment you are not a human... and have no right to the things around you. I lent them to you for wise use only; never forget that I lent them to you. As soon as you use them unwisely, be it the

greatest or the smallest, you commit treachery against My world, you commit murder and robbery against My property, you sin against Me!" This is what God calls unto you, and with this call does God represent the greatest and the smallest against you and grants the smallest as well as the greatest a right against your presumptuousness.... In truth, there is no one nearer to idolatry than one who can disregard the fact that all things are the creatures and property of God, and who then presumes also to have the right, because he has the might, to destroy them according to a presumptuous act of will. Yes, that one is already serving the most powerful idols -- anger, pride, and above all ego, which in its passion regards itself as the master of things.²⁰

Rabbi Hirsch also teaches that "destruction" includes using more things (or things of greater value) than is necessary to obtain one's aim.²¹ The following *Midrash* is related to this concept:

Two men entered a shop. One ate coarse bread and vegetables, while the other ate fine bread, fat meat, and drank old wine. The one who ate fine food suffered harm, while the one who had coarse food escaped harm. Observe how simply animals live and how healthy they are as a result.²²

ECOLOGY IN JEWISH HISTORY AND PRAYERS

Much of early Jewish history is closely connected to the natural environment. The patriarchs and their descendants were shepherds. Since their work led them into many types of natural settings, including mountains, prairies, wilderness, and desert, they developed a love and appreciation of natural wonders and beauty. According to Charles W. Eliot, "no race has ever surpassed the Jewish descriptions of either the beauties or the terrors of the nature which environs man."²³

Jews have often pictured God through His handiwork in nature. Abraham, the father of the Jewish people, when marveling at the heavenly bodies, intuitively felt that there must be a Creator of these wonders. The prophet Isaiah exclaims:

Lift up your eyes on high,
And see: Who has created these?

He that brings out their host by numbers,
He calls them all by name;
By the greatness of His might, for He is strong in power,
Not one fails. Isaiah 40:26

The greatest prophet, Moses, during the years when he was a shepherd, learned many facts about nature, which were later useful in leading the Israelites in the desert. The Ten Commandments and the Torah were revealed to the Jews at Mount Sinai, in a natural setting. The forty years of wandering in the wilderness trained Israel in the appreciation of natural beauty.

Many Jewish prayers extol God for His wondrous creations. Before reciting the *Sh'ma* every morning, religious Jews say the following prayer to thank God for the new day:

Blessed are You, Oh Lord our God, King of the universe.
Who forms light and creates darkness,
Who makes peace and creates all things.
Who in mercy gives light to the earth
And to them who dwell thereon,
And in Your goodness renews the creation
Every day continually.
How manifold are Your works, O Lord!
In wisdom You have made them all;
The earth is full of Your possessions...
Be blessed, O Lord our God,
For the excellency of Your handiwork,
And for the bright luminaries
Which You have made:
They shall glorify You forever.

In the Sabbath morning service, the following prayer is recited: "The heavens declare the glory of God, and the firmament shows His handiwork" (Psalms 19:2).

However, Judaism does not only consider the "heavens above." It also deals with practical down-to-earth issues. The following law, which commands disposal of sewage, even in wartime, illustrates the sensitivity of the Torah to environmental cleanliness, by

mandating the burial of waste in the ground, not dumping it into rivers or by littering the countryside!

You shall have a place outside the military camp, when you shall go forth abroad. And you shall have a spade among your weapons; and it shall be when you sit down outside, you shall dig therewith, and shall turn back and cover that which comes from you.

Deuteronomy 23:13-15

Traditionally, the preservation of the land of Israel has been a central theme in Judaism. The three pilgrimage festivals (*Pesach*, *Shavuot*, and *Sukkot*) are agricultural as well as spiritual celebrations. Jews pray for dew and rain in their proper time so that there will be abundant harvests in Israel.

CURRENT ECOLOGICAL THREATS

As mentioned in the Preface, in 1993 over 1,670 scientists, including 104 Nobel laureates in science, signed a "World Scientists' Warning To Humanity" which argues that human beings are inflicting "irreversible damage on the environment and on critical resources," and that "fundamental changes are urgent" if "vast human misery is to be avoided and our global home on this planet is not to be irretrievably mutilated."²⁴ While there has been some progress since that warning was issued, there has also been further deterioration in many areas:

- Scientists surveyed by the Museum of Natural History in New York City indicate that the Earth is experiencing the fastest rate of extinction of species in history.²⁵ Harvard biologist Edward O. Wilson writes:

There is no question in my mind that the most harmful part of ongoing environmental despoilation is the loss of biodiversity. The reason is that the variety of organisms... once lost, cannot be regained. If diversity is sustained in wild ecosystems, the biosphere can be recovered and used by future generations to

any degree desired and with benefits literally beyond measure. To the extent it is diminished, humanity will be diminished for all generations to come.²⁶

* Industrial chemicals such as chloroflourocarbons and pesticides such as methyl bromide and carbon tetrachloride are causing a depletion of the ozone layer. This increases the penetration of deadly ultraviolet radiation at the earth's surface, which causes cataracts, weakened immune systems, and skin cancers in humans, and kills wildlife, crops, and vegetation. Every winter and spring, massive "holes" in the ozone layer appear over the North and South Poles. U.S. governmental agencies announced in October, 1998 that the ozone layer over Antarctica measured 10 million square miles, an area larger than North America.²⁷

* Inefficient use of depletable groundwater threatens food production and essential human systems. Due to heavy demand for water, there are serious shortages in about 80 countries (including Israel) which contain 40 percent of the world's population.²⁸ According to a report released recently by Population Action International, over the next 25 years, the number of people facing chronic or severe water shortages could increase from 505 million to more than 3 billion. The report said water shortages would be worst in the Middle East and much of Africa.²⁹ Globally, 2 billion people live in areas with chronic water shortages.³⁰ The Ogalalla aquifer that provides water for one-fifth of all U.S. irrigated land is overdrawn by 12 billion cubic meters per year, a problem that has already caused more than two million acres of farmland to be taken out of irrigation. In California's Central Valley, which grows half of U.S. fruits and vegetables, groundwater withdrawal exceeds recharge by 1 billion cubic meters per year.³¹ A combination of population growth, drought, desertification, waste of water, and global warming is causing a serious water shortage in China that experts say could induce environmental and political crises. Officials are blaming drought for a 9.3 percent drop in the summer grain yield, and water rationing has been imposed on residents and industries in nearly 100 cities.³²

* Pollution of lakes, rivers, and groundwater further limits supplies of usable water. In the past few decades, industrialization, population growth, and the heavy use of chemical fertilizers have doubled the amount of nitrogen in circulation, contributing to environmental problems worldwide and possibly to human health problems like cancer and memory

failure. Hardest hit are coastal bays and oceans -- deadly algae blooms are cropping up from Finnish beaches to Hong Kong harbors, massive unexpected fish kills are occurring from Maryland's Chesapeake Bay to Russia's Black Sea, and coral reefs are in decline around the globe.³³

* Acid rain and air pollution are causing widespread damage to humans, crops, and forests. Over 140 million Americans live in regions that flunk air-quality tests for ozone pollution, according to an American Lung Association report.³⁴

* About 70 percent of the world's 13.5 billion acres of agricultural dry lands -- almost 30 percent of the Earth's total land area -- is at risk of becoming desert.³⁵ Over a billion people in 135 countries depend on this land for food.³⁶

* As global pesticide use increased from almost nothing in 1945 to 4.7 billion tons a year in 1995, at least 6 people are poisoned by pesticides each minute somewhere in the world and about 220,000 people die of its effects annually.³⁷

* At current rates of destruction, the world's remaining rain forests will virtually disappear by about 2031.³⁸ According to a study published in the journal *Science*, as little as 5 percent of the Amazon rainforest in Brazil may remain as pristine forest by 2020. Researchers fear that roads, new homes, logging, and oil exploration will devastate the 1.3 million-square-mile Amazon forest, which makes up 40 percent of the Earth's remaining tropical rainforest.³⁹

The above examples, and many more, are not meant to imply that there has not been any good environmental news. Since 1970, when the first Earth Day was held to increase environmental awareness and promote action to reduce environmental threats, there has been much new legislation, including the Clean Air and Clean Water Acts in the U.S., that have led to improvements. For example, for the second consecutive year, no first-stage ozone pollution alerts were reported in the greater Los Angeles area in 2000.⁴⁰ Many of the 16 million people who live in the region are now breathing air that meets all U.S. EPA

health standards. Unhealthful days have decreased 75 percent over the past 15 years, despite sharp increases in the number of people and cars in the region. The improvements came about because tough air quality regulations led to the development of cleaner consumer products, cars, power plants, and factories. However, it may be difficult to maintain this progress since 6.7 million more people are expected to live in the Los Angeles area by 2020.

CAUSES OF CURRENT ECOLOGICAL PROBLEMS

The root cause of current ecological crises is that the realities of our economic and production systems are completely contrary to Torah values:

- * While Judaism stresses that "the earth is the Lord's" and that we are to be partners in protecting the environment, many corporations consider the earth only in terms of how it can be used to maximize profits, with only minor regard for damaging environmental effects.

Instead of starting with protection of the earth as a prime value and building production and economic systems consistent with this value, our production is generally based on the idea of maximum gain, regardless of harmful ecological consequences. Corporations and utility companies often make choices with maximum profit as their overriding concern. Their shortsighted application of technology is a prime cause of current ecological crises.⁴¹

- * While Judaism mandates *bal tashchit*, our economy is based on waste, on buying, using, and disposing. Advertising constantly tries to make people feel guilty if they don't have the newest gadgets and the latest styles. Every national holiday has become an orgy of consumption with department store sales filling mall parking lots with cars.

- * The United States has become a throwaway society. We're using increasing numbers of plastic containers, although they harm the environment more than glass or metal containers. For convenience, we are also using greater amounts of paper products each

year. Many potentially valuable products that could be used for fertilizer are instead discarded; these include sewage sludge, garbage, agricultural and forest residues, and animal manure.

The world's richest countries, with 20 percent of the world's population, account for 86 percent of all private consumption expenditures. By contrast, the poorest 20 percent of the world's people spend only 1.3 percent.⁴²

Due to waste, it has been estimated that the average American's impact on the earth's life support systems, in terms of pollution and resource consumption per person, is about fifty times that of a person in India or another less developed country.⁴³ Using this figure, the U.S. population has an impact equal to that of 14 billion Third World people, well over twice the population of the world today.

As an example of our wastefulness, water consumption in the U. S. domestic sector (although small compared to agricultural and industrial consumption) is sizable; the average North American uses over 170 gallons per day, more than seven times the per capita average in the rest of the world and nearly triple Europe's level. By comparison, the World Health Organization says good health and cleanliness can be obtained with a total daily supply of about 8 gallons of water per person.⁴⁴

* While Judaism established a Sabbatical year in which the land is allowed to lie fallow and recover its fertility and farmers may rest, learn, and restore their spiritual values, today, under economic pressure to constantly produce more, farmers plant single crops (the same crops in the same land, with no crop rotation) and use excessive amounts of chemical pesticides and fertilizer, thereby reducing soil fertility and badly polluting air and water.

JEWISH VALUES CAN HELP SOLVE THE ENVIRONMENTAL CRISIS

Based on biblical values of "The earth is the Lord's" and *bal tashchit*, Jews and others who take religious values seriously must lead efforts to preserve the environment.⁴⁵ We

must work to change a system based primarily on greed and maximization of profits which entices people to amass excessive material goods, thus causing great ecological damage. We must work for approaches that put primary emphasis on protection of our vital ecosystems.

To reduce potential threats to the U.S. and the world, we must change over to simpler, saner life-styles. Religious institutions, schools, and private and governmental organizations must all play a role. We must reapply some of our industrial capacity toward recycling, solar energy, and mass transit. We must design products for long-term durability and ease of repair. We must revise our agricultural and industrial methods so that they are less wasteful of resources and energy. Perhaps there should be a Presidential Commission appointed solely to consider how we can stop being such a wasteful society. Changing will not be easy, since our society and economy are based on consumption and convenience, using and discarding. But it is essential that we make supreme efforts. Nothing less than human survival is at stake.

The proper application of Sabbath values would help end environmental pollution. The Sabbath teaches that we should not be constantly involved in exploiting the world's resources and amassing more and more possessions. On that day each week we are to contemplate our dependence on God and our responsibility to treat the earth with care and respect. Rabbi Samson Raphael Hirsch powerfully expresses this:

To really observe the Sabbath in our day and age! To cease for a whole day from all business, from all work, amidst the frenzied hurry-scurry of our age! [And Rabbi Hirsch was writing well over 100 years ago, when commerce and production were far less frenzied!] To close the stock exchanges, the stores, the factories -- how would it be possible? The pulse of life would stop beating and the world perish! The world perish? On the contrary; it would be saved.⁴⁶

The philosophy of the Sabbatical year provides yet another approach to environmental problems. There could be great benefits if land, on a rotating basis, could be left fallow,

free from the tremendous amounts of chemicals and fertilizer that pollute air and water and reduce soil fertility. If people could spend a (Sabbatical) year from their usually harried lives, away from the numbing bustle of the marketplace, and from the constant pressure to produce and buy goods, they would have the opportunity to use their time for mental and spiritual development. Perhaps they might even have time to study methods of reducing pollution and other current problems.

As co-workers with God, charged with the task of being a light unto the nations and accomplishing *tikkun olam* (restoring and redeeming the earth), it is essential that Jews take an active role in struggles to end pollution and waste of natural resources. Based on the central Jewish mandate to work with God in preserving the earth, Jews must work with others for significant changes in our economic and production systems, our values, and our life-styles.

¹ Paul Flucke, "For the Sin of Terricide," in *New Prayers for the High Holy Days*, Rabbi Jack Riemer, ed., New York: Media Judaica, Inc., 1970, 44.

² *Shabbat* 10a; *Sanhedrin* 7.

³ Mishna *Kiddushin* 4:12; Jerusalem Talmud, *Kiddushin* 66d.

⁴ Mishna *Baba Batra* 2:8.

⁵ Mishna *Baba Batra* 2:8-9.

⁶ Mishna *Berachot* 30:5

⁷ Story told by Rabbi Shlomo Riskin in "Biblical Ecology, A Jewish View," a television documentary, directed by Mitchell Chalek and Jonathan Rosen.

⁸ *Shabbat* 10a; *Sanhedrin* 7.

⁹ Kook, *A Vision of Vegetarianism and Peace*, Section 2; Also see J. Green, "Chalutzim of the Messiah - The Religious Vegetarian Concept as Expounded by Rabbi Kook" (lecture given in Johannesburg, South Africa), 2.

¹⁰ Ibid.

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- 11 *Kiddushin* 32a.
- 12 *Sefer Hachinuch*, # 530.
- 13 *Hullin* 7b.
- 14 *Shabbat* 140b.
- 15 *Baba Kamma* 91b.
- 16 *Berachot* 52b.
- 17 *Shabbat* 67b.
- 18 Maimonides, *Mishneh Torah*, Laws of Kings and Wars 6:8,10.
- 19 *Sefer Ha-Hinukh*, #529.
- 20 Rabbi Samson Raphael Hirsch, *Horeb*, Chapter 56, Sections 397, 398.
- 21 *Ibid*, Section 400.
- 22 Midrash *Ecclesiastes Rabbah* 1:18.
- 23 Quoted in David Miller, *The Secret of Happiness*, New York: Rabbi David Miller Foundation, 1937, 9.
- 24 World Scientists' Warning to Humanity, Union of Concerned Scientists, 1992,
<http://www.ucsusa.org/resources/warning.html>.
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⁴⁰ *Los Angeles Times*, Gary Polakovic, January 14, 2001,
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⁴¹ For a detailed analysis of how the misapplication of technology has been a prime cause of pollution problems, see Barry Commoner, *The Closing Circle*, New York: Bantam Books, 1974.

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⁴³ Wisconsin Department of Public Instruction, Pollution: Problems, Projects, and Mathematics Exercises, Bulletin No. 1082, p. 50.

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<http://www.deseretnews.com/dn/view/0,1249,210006918,00.html>

⁴⁵ A national Jewish organization which is applying Jewish values to the solution of current environmental threats is "The Coalition on the Environment and Jewish Life," (COEJL) a collaboration of 29 national Jewish organizations spanning the spectrum of Jewish religious and communal life, which serves as the voice of the organized Jewish community on a wide array of environmental issues. COEJL is the Jewish member of the National Religious Partnership for the Environment.

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