Save the Musht
(and the Land of Palestine)

By Rosina Hassoun

A rather funny looking fish swims in the Sea of Galilee (Lake Tiberias), oblivious of its predicament. Since the creation of the State of Israel, the numbers of this species have been dropping. The Musht, or more scientifically *Talapia galilaea*, is a native fish of the Sea of Galilee. It is commonly known as Christ’s fish or Saint Peter’s fish. The Musht is widely associated with the miracle of the multiplication of the loaves and fishes in the Bible. What is not widely known is that the Musht could be considered an endangered species.

However, this article is not a simple appeal to save the Musht. There are issues of such importance involved in the Arab-Israeli conflict that they make the possible extinction of a single species appear almost inconsequential. The irony of the situation is that printing up “Save the Musht” T-shirts and launching a campaign for the fish may do more to raise awareness about Middle East issues than years of lectures and appealing for human rights.

Many people argue that environmental issues should not be a priority in the Arab-Israeli conflict, given the level of violence and loss of human life. What is not understood is that in reality political, social, economic and environmental issues cannot be compartmentalized. Mistreating the environment and mistreating people are often one and the same action.

Unfortunately, there is little awareness in Arab and non-Arab circles of the environmental issues involved in the Middle East. The environmental issues involved in the peace talks are not widely known. The environmental problems at the heart of the Palestinian-Israeli struggle are rarely exposed. Most people do not even know that Palestinian representatives (although only United Nations Observers) were present and active at the Earth Summit meetings in Rio de Janeiro last summer.

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About This Issue

Rosina Hassoun delivered the first of four papers on “The State of Palestine,” a panel sponsored by the American-Arab Anti-Discrimination Committee at its National Convention, last April, in Alexandria, Virginia.

The other three presenters talked politics — everything from Israeli annexation of the Territories to Palestinian sovereignty over them. When the time came for questions, the 500-plus audience directed all their queries to the political analysts.

Then something unexpected happened. The session ended, and the three analysts gradually made their way out of the room. But not Rosina. She literally was surrounded by reporters and interviewers (one from the Arabic version of the BBC), as well as other participants just fascinated by what she had to say; they wanted to hear more. A half-hour later, when I finally managed to speak with her, I invited her to write our feature article.

As we go to press, the 11th round of the peace talks are in progress, and Washington is abuzz with Middle East politics. The option of choice, it seems, turns out to be “Gaza-Jericho First” — and the walls between the P.L.O. and the State of Israel appear to be tumblin’ down.

If and when they do tumble, their rubble will expose the detritus of 45 years of colonization and 25 years of military occupation. Eventually, however, the negotiators will exit the room, at which time Palestinians and Israelis will confront those matters of consequence over which, jointly, they share stewardship. They’ll want to talk to Rosina Hassoun.

The paradigms of the land held by Palestinians and Israelis are found, as ecologist Hassoun points out, in the two peoples’ respective literature. A new anthology of Palestinian literature has just been published by Columbia University Press, and we are pleased to include it in our selection of books and videos listed on pages 13-16.

Note: In a previous About This Issue column, I incorrectly identified Colin Edwards as editor of Moshe Menuhin’s book, “The Decadence of Judaism in our Time.” The Menuhin book he edited was “The Menuhin Saga.”

John F. Mahoney
Executive Director
Middle East Regional Issues

The Middle East is a region with a multitude of problems, most of which they share with other Third World people. It would take much more space to list them all on a country by country basis, but it is possible to list the major substantive regional issues: [1]. Increasing populations and limited carrying capacity of lands; [2]. Food dependency; [3]. Water scarcity and quality; [4]. Fragile environments, toxic chemicals, and human waste disposal; [5]. Disparity between rich and poor; [6]. Lack of democracy and minority rights, [7]. Armament and nuclear proliferation.

The seeds of all of these problems in the Middle East date at least to the colonial period. The creation of the State of Israel further complicated the picture. The only Arab country which approached self-sufficiency was Iraq before the Gulf war. Today, all countries in the Middle East and North Africa, especially Israel, are dependent upon outside sources of food.

Most Arab countries and Arab populations under Israeli Occupation have high birth rates. The regional outlook is one of growing populations and increasing food dependency. By definition, this means pushing land to the limit of its production capability while being able to keep up with the need to feed the hungry masses.

The shortfall in ability to produce food has to be met in order for regimes to remain stable. Governments then resort to buying basic foodstuffs from foreign sources. Only the few wealthy Arab countries can afford to pay for the food, while the other countries, including Israel, become increasingly indebted. The appetite for luxury foods and items further increases the indebtedness.

For example, Israel imports the greatest amount of foreign food per capita of any country in the region. Israeli tastes in food include many delicacies not found in the Middle East. The upper and middle classes in the Arab world are also acquiring tastes for foreign prepackaged and exotic foods. The switch away from native diets has increased the likelihood of health problems associated with westernization like high blood pressure, high cholesterol and cardiovascular disease—all ecological side effects. The water and other natural resources of the region are not equitably distributed and are scarce, limited, and mostly non-renewable. Israel, since its creation in 1948, has acted as a sponge, soaking up all available surrounding water sources and utilizing high per capita resource and energy usage. It is interesting to note that every time Israel approached 100% of its surface water use, the problem was solved through the acquisition of water by war. This resulted in Israel's holding the water of Southern Lebanon and the Golan Heights, effectively giving Israel control of the crucial head water's of the Jordan River.

As countries attempt to increase their agricultural productivity, more land is placed under irrigation and soil salinity increases. As human populations grow, the problem of human waste disposal mounts and no country in the region adequately disposes of its human waste. Even Israel, which is considered by western standards a developed nation, has dumped raw sewage into the Mediterranean. Israel continues this practice by denying Arab populations under her rule proper waste disposal facilities. As a result of the widespread contamination, the entire Mediterranean basin is endangered. In addition, the increased use of chemicals and fertilizers and indiscriminate disposal of industrial waste
poses new threats to the water quality of the region.

Israel is the sixth largest arms dealer in the world and a modern military giant. The regional military imbalance has sparked an arms race in the Middle East. The production and acquisition of weapons wastes massive amounts of natural resources and capital which are badly needed in this region to provide for the basic quality of human life. After South Africa’s recent admittance of its nuclear capability, there is no longer any doubt about Israel’s capacity to make war. These two countries were working in conjunction to develop nuclear weapons. Israel has never signed a nuclear non-proliferation treaty and its plant at Dimona has never been inspected by international regulatory agencies. The questions of where and how they are disposing of those nuclear wastes have not been answered.

With Israel’s nuclear threat, some Arab countries are desirous to pose a counter-threat of their own. To date, no Arab country possesses nuclear war capability. The only logical deterrent to that development would be total nuclear disarmament and the creation of a nuclear free zone in the Middle East and North Africa. Given the regional propensity for war and Israel’s total reluctance to comply, the likelihood of the usage of nuclear weapons remains high. It is an understatement to point out that plutonium is perhaps the most deadly substance in the universe and its presence in the region poses a substantial threat to life.

Dueling Paradigms: The Arab-Israeli Conflict from an Ecological Viewpoint

Nature utilizes different selection criteria than humans for judging survival and ownership. While humans argue over who was the first inhabitant or who owns the land by virtue of religion or residence, nature disregards such matters. From an ecological point of view, the ultimate owner of a land is determined by stewardship. History is full of examples of civilizations which failed to survive because they neglected to be good stewards of their environment. One testimony to this fact is that the remnants of ancient Sumer, humanity’s first civilization, lies today in a vast man-made desert.

How a people administer their human and natural resources depends upon their cultural attitudes, their image of themselves and the land. Israeli and Palestinian images differ radically. They project conflicting worldviews and this makes the struggle more intense and irreconcilable. A war of paradigms results, fought on the field of poetry, writings and myths. Grasping these paradigms provides a key to understanding the Palestinian-Israeli conflict.

Zionists see Palestine as a wasteland and desert.

The wasteland paradigm was promoted by the World Zionist Organization in their slogan—coined to solve the conscience of anyone who might be uneasy about uprooting a native population—that Palestine was “a land without a people for a people without a land.” (Paradoxically, most promoters of this slogan were themselves secretly worried about what to do with the native population.)

The paradigm of the desert appeared in the Zionist claim that they "made the desert bloom." By this one image they expunged the storied role of Palestine as the bread basket of the Middle East, that fragile, delicate ecosystem that fed the great empires of prehistory and history.

For the Zionist colonizers this duel image of wasteland and desert satisfied their ideological imperatives:

Ownership. Those who create something out of nothing get to keep it. Jews, who in 1947 owned 5.6% of Palestine, now, in 1993, claim ownership to 92% of Israel and 70% of the West Bank and Gaza.

Absorption. A wasteland offers a seemingly endless capacity for colonization. Accordingly, since the founding of the State of Israel in 1948, some 2.5 million Jews have settled this “borderless” land. (Israel, in fact, is the only country in the world with no official boundaries.)

Exploitation. Jews, especially those from Europe, America and South Africa, have brought with them western attitudes towards resource usage, namely that resources are there for the taking, without limits. European and American Jews also brought with them Western images of monocropped fields, agribusiness, manicured lawns and swimming pools as part of their idealized lifestyles.

Palestinians see Palestine otherwise. Their images are traditionally those of motherhood, fertility and village.

Motherhood. The paradigm of land as mother, found in most indigenous cultures, is reflected throughout Palestinian literature, especially in their poetry. This mother-image stems from the belief of Palestinians that they are descended from the multitudes of people who previously inhabited Palestine in an unbroken line dating back to the Canaanites and before—a sharp contrast with Israeli claims that Palestinians were recent arrivals to the land just prior to 1948.

Fertility. The related paradigm of fertile crescent (or bread basket) derives from the Palestinian village-based system of food production founded on agricultural/horticultural/silvicultural practices of planting citrus, olives, grains and vegetables with rock-terracing. These agricultural methods, devel-
oped over centuries, reflect ancient Nabatean and other early practices. Accordingly, Palestinians do not see their efforts to farm the land as making a desert bloom, but as producing food on an already fertile region.

In doing so, Palestinians have followed historical patterns of crop rotation, collective and private land ownership, share cropping and multicropping (more than one use or one crop per land area like grazing animals or planting vegetables between olive trees.) These traditional patterns represent deeply ingrained generational practices. Palestinians, to be sure, have modernized these practices, but with uniquely indigenous adaptations.

Village. Palestinians also developed relationships between the villages and cities for the flow of goods and services. In cities, unique crafts and industries developed, such as the production of olive oil soap. Their basic system of food production was supplemented by a village barter system, local markets and city suks (bazaars.) This system, including the development of local dialects, costumes and village culture distinctions, cannot possibly be the result of recent development, as proposed by some Israelis. Rather, the dependency of the agricultural villages and the cities is indicative of an integrated concept of life on the land.

Today, there is a global trend towards abandonment of traditional farming and increased urbanization. Those who remain in agriculture are being lured into the international market system to produce cash crops, rather than provide subsistence. The debts of Third World farmers increase as they become trapped in the cycle of needing more hybrid seeds, more chemicals, and more machines and fuel. This is happening throughout the Middle East and North Africa too.

But there are some who are questioning whether the Euro-American style of machine-age farming can or should be applied worldwide. Can peoples use technologies that are more appropriate to their climates and cultures and still modernize their productivity? Surprisingly, some of the loudest voices for a shift to a kinder, gentler type of agriculture are coming from Europe and the United States. Researchers are now examining ways to update traditional farming methods and practice multicropping, terracing, use of follow, and alternatives to chemicals. People are being asked to recycle materials and change wasteful lifestyles. These massive lifestyle changes can only be accomplished in the context of real changes in paradigms.

By matching the paradigm of each people with their actions, the motivations behind the actions become apparent. It is possible to look at land use practices, water use, agricultural practices and even social policies in the light of the paradigms a people holds.

Water

In the case of water, the differences in the application of the two conflicting paradigms of Israelis and Palestinians paints a dramatic picture. Since the arrival of the first modern Israeli settlers in the late
1800's, Israelis have declared war on the land. Their efforts from the beginning have been to completely alter, control, tame, and possess all the water in the land.

Upon the creation of the state, one of the first acts of the Israeli government was the complete alteration of the historical surface water of the entire country and the region. All surface and ground waters were rationalized and placed under the administration of the Israeli Merdot company.

In 1948, the Israelis undertook a massive project which completely eliminated the northern wetlands, including Lake Hula and surrounding marshes. Lake Hula was one of the only places on earth where waterfowls from three continents (Africa, Asia, and Europe) sojourned together. In order to accomplish the complete draining and disposal of the wetlands, Palestinian populations of this area were displaced en masse. This vast and rare wetland was turned into dry farmland and is today an area of Israeli show farms.

Then the Israelis began the construction of one of the world's largest and most costly water pipelines, carrying water from the fertile northern Galilee to the southern Negev desert. This effectively turned the Sea of Galilee into a reservoir, and water is now pumped via enormous pipes and pumping stations into the southern desert. The result has been a massive drawdown of the waters of the Galilee and coastal Palestine, increasing salination of the water and the soils. In some areas, the soil salinity is already six times what it was in 1948.

In changing the water flow of historical Palestine and developing the area of northern Galilee for western agribusiness, the pesticides and chemical fertilizers drain into Lake Tiberias (the Sea of Galilee) which now suffers from eutrophication. Record rain and snow fall in the last two years have benefited the lake, but this is a temporary reprieve. Brown algae blooms cover the lake almost every year, choking out the oxygen in the water and endangering the fish there. Israeli sources claim this is natural lake aging. Palestinians note that it never aged this way prior to Israeli draining of the northern marshes which acted as a natural water filter.

No amount of drip irrigation can compensate for this restructuring of the water resources. In spite of these efforts, Israel with its current level of technology and agricultural activity does not have the potential of ever becoming self-sufficient and still imports the greatest amount of foodstuffs of any country in the region. In effect, is deeply ingrained is the need to maintain the myth of making the desert bloom, that the Israelis would literally drain the country dry in order to maintain their show farms. The same holds true of Israeli use of ground water.

The average Israeli consumption of water is at least three times greater than that of the Palestinians. For example, the annual per capita water consumption level for the Arab town of Nazareth is 37.5 cubic meters. This contrasts greatly with the Jewish town of Nahariya which has a consumption level of 111.1 cubic meters. These figures can be somewhat misleading since the Israelis are allowed almost unlimited access to water, while Palestinian water use is heavily limited by quotas, restrictions on digging wells, and metered and taxed agricultural water use. In over 14 years, the Israelis have not granted a single new well license to Palestinians in the West Bank and Gaza.

Most startling is the fact that the West Bank village of Kufr Ein receives only 44 liters of water per capita per day. Many times in the summer the village only has water one day a week. The United Nations considers 44 liters per capita per day to be the minimum needed to maintain health standards. The bitter irony is that Palestinians pay as much or more for water than Israeli Jewish citizens.

Israelis dig large, deep wells for their settlements which draw down the water table and lower water levels in the surrounding historical Arab wells. The Palestinians have not been allowed to deepen their wells. This has the effect of reducing their water levels and concentrating any biological or chemical contamination which might exist in the wells. The draw down also increases the particulate matter in their water and adds to the health risk.

What happens when one population gets unlimited water and the other is only allowed the minimum possible for the sustenance of life and health? If the Palestinians did not have historically lower water usage needs, they would not have been able to maintain their existence under the Israeli restrictions thus far.

Every new Israeli settlement lowers the water table. In light of this fact, the question of the carrying capacity of the land must be raised. Ecologically, the carrying capacity of the land is defined, in this case, as how many people the land can support (through agriculture, water use, space, clear air, etc.) without severe degradation. The answer to the question of how many people it takes to reach or exceed the carrying capacity of a land depends on what kind of lifestyle the population practices. The practice of continued Israeli settlement brings up the issue of whether the Israelis have already exceeded the carrying capacity of the land.

Israeli scientists have been sounding a warning about an impending water crisis for over a dec-
Hillel Shuval wrote in 1980, “By the year 2000, with an estimated population of 5,600,000, there will be insufficient water to meet annual requirements from natural sources. In addition, if ground water pollution by natural salts and nitrates continues unabated, some 80% of the wells in the coastal aquifer will have to be abandoned for municipal use and their use for agriculture will be severely diminished”. Shuval was unaware at that time of the plans to resettle large numbers of Russian immigrants in Israel. Many wells along the coastal aquifer have already been abandoned due to salt water intrusion and Gaza’s water is becoming increasingly brackish. Unfortunately, Shuval’s predictions appear to be well on their way to reality.

Israel had virtually no environmental policy until the mid-1960’s. Environmental laws were enacted only after major outbreaks of cholera and yellow fever from raw sewage in the Mediterranean caused a decline in tourism. In another case, when nitrates in the ground water in Galilee and coastal areas from fertilizer used by Israeli farmers exceeded national safety levels, the Israeli authorities just raised the allowable level. Nitrates have been linked to cancer in animals and humans. A picture of environmental irresponsibility is beginning to emerge.

Palestinians left the surface and ground waters in fairly unaltered condition for centuries by utilizing indigenous agricultural practices. Palestinians were beginning a process of modernization prior to the creation of Israel. Evidence of increased irrigation is a possible trend among Palestinian farmers prior to Israeli rule. It is difficult to judge how they might have developed, if not for their disenfranchisement.

Palestinians today look with bitterness to the inequalities in their lifestyle as compared with the Israelis. The Israeli villas, the swimming pools, the cars, the highways and even such every day amenities as sewage/waste disposal and clean tap water are viewed with envy by many Palestinian youth. This is evidence that paradigms change, but there is little recognition that the current conflicting images of the land held by the parties to the conflict may need restructuring. Detrimental policies continue to alter. Another factor, especially with regards to water use, is that the Israelis have all the power in this situation, while Palestinians are powerless to make changes in their resource use. How this will change as Palestinians assume autonomy over the West Bank and Gaza will be of crucial importance.

name engraved on a plaque on the tree or, if you provide a large endowment, you can have an entire forest dedicated in your name. This practice supports the Israeli view that Palestine was a desert that they are re-foresting.

However, the environmental and social issues associated with the tree planting is not mentioned in their advertisements. In the beginning, many of these agencies were buying and planting non-native trees, and/or trees with a high water requirement. They were often planted in single species stands, rather than in ecologically sound mixed Mediterranean scrub forests. Mediterranean scrub forests were the original forest type prior to the deforestation of the land by the ancient Romans for their road and ship building.

The social issues are even more complex because the forest land is, for the most part, confiscated Palestinian land. People have suffered the loss of their land so that forests can be planted. One of the most bitter notes of all is that one of these planted forest now harbors the remains of the village of Deir Yassin. Deir Yassin is the site of the massacre of 254 Palestinians by members of the Irgun and Stern Gang, just prior to the creation of the Israeli state.

Tragedies like Deir Yassin were not the end of the cycle of violence against the people and the land. Imagine what happens to the environment when more than 150,000 trees are uprooted in just the first four years of the intifada. This uprooting is an ecological disaster of major proportion that no artificial forest planting program can ameliorate.

The trees were uprooted to punish Palestinians for their civil disobedience, but it was the land that also took the beating. The majority of the trees uprooted are olive and

Trees

The Israeli image of the land as an entity to be tamed and made to blossom is also manifest in their environmental policy towards trees. There are dozens of Israeli agencies which, for a donation, will plant a tree in Israel. You can have your
citrus. Olives are native to Palestine and some of the trees uprooted were centuries old. Some may have even been present at the time of Christ. Hundreds or thousands of years of tree growth cannot really be replaced. Olives and citrus take a long time to mature to full production. Future generations have been deprived of the benefits of those trees forever.

Olives grow extensive root systems which hold the soil in place and when they are uprooted, the soil is easily lost to erosion. The moisture held in the soil by the citrus and olive trees is lost with the removal of the tree and the soil becomes dry and infertile. While the uprooting continues, Israelis tout their drip irrigation methods as miraculous and send advisors to Third World Nations to teach them how to conserve their lands.

In contrast, Palestinian farmers tended the citrus and olive trees for centuries. There are accounts of a thriving olive and citrus production in medieval times (see Khalidi, 1984). It is true that Palestinians were more interested in planting and maintaining trees which had human and commercial usage, rather than trying to replant the mixed scrub forests that existed at the time of the Romans. As a largely agrarian society prior to 1948, this was in keeping with their practical image of the land. As education levels have increased among Palestinians, environmental awareness is also increasing.

Agriculture and Villages

In keeping with the Palestinian image of the land, Palestinians established patterns of urban and rural life and land utilization which were derived from native sources. Land use in the villages was both practical and ecological. Palestinian villages and towns were historically built on hill tops. Hill tops were defensible against attack, but this also allowed for the steepest and most agriculturally unsuitable land to be used for housing. Historically, small gardens often accompanied the houses. Surrounding the villages, were multipurpose lands used for olives, citrus and grazing animals. On the hill sides surrounding the villages, rock terraces were painstakingly maintained in patterns and designs which developed from ancient Nabatean methods. Over time, Palestinians added and refined the methods. The rock terraces held the soil and prevented erosion.

The flat open plains and valleys were used for the production of grains and wheat. By living in the hills and coastal areas, the exposure to malaria carrying mosquitoes found in the moister valleys was minimized. Thus Palestinians developed survival mechanisms for coexisting in their environment.

Village-based agriculture was the majority way of life for the Palestinians prior to 1948. With the massive confiscation of village lands by Israel (especially those lands held in common by the villagers for grazing and wheat production), Palestinians have been forced to adopt a more urbanized lifestyle. Also with increased education, the popularity of farming and agricultural pursuits has declined among younger Palestinians.

The traditional village-based agricultural system of the Palestinians can be contrasted with Israeli agricultural practices. The epitome of Israeli agricultural practices lies in the show farms of the Galilee and the Negev. The Israeli attitude towards farming is that of monocropped Euro-American type farming. If mosquitoes are a problem, the Israeli solution was to drain the surface water and apply pesticides. When a kibbutz is built on a hillside, one rarely sees Israelis using rock terracing to prevent soil erosion. Rock terracing requires massive physical labor, something most Israelis consider unsuitable.

What happens when land, which has been meticulously terraced as the Palestinian farmers did for centuries, suffers the punishment of the destruction of a village? Since 1948, the Israelis have destroyed over 400 Palestinian villages. The only plants which survive or emerge from the destruction are pioneer species like hardy desert cactus. Chances are good that if you find a large patch of cactus in the pre-1948 area of Israel, you have found a destroyed Palestinian village. (See Khalidi 1992 for startling evidence). So who is creating deserts?

Toxic Nightmares

One of the most damaging practices Israelis are currently involved in is the supplying of Palestinian farmers with toxic chemicals (pesticides, herbicides, and fungicides) for use in agriculture. While some of these chemicals are useful and necessary to the maintenance of health and crop production, what is worrisome is the choice of chemicals supplied, when alternatives are available. Palestinian farmers pay high prices to receive these chemicals, often without the proper safety training in their disposal, storage and application. It also appears that Israeli farmers are not utilizing the more toxic of these chemicals.

The table on page 9 lists 74 hazardous chemicals currently in use in the West Bank and Gaza by Palestinian farmers. It would be beyond the scope of this article to explain the dangers of each. A few of them, however, deserve mention:
- The impact of DDT is well known. It has been banned for use in the United States for almost 30 years. DDT builds up in the body and magnifies as it passes through the food chain. It has been linked
## Insecticides, Herbicides, and Fungicides
### Used in the Gaza Strip, 1987-1988

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<td>Aldicarb *</td>
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<td>Azinophos-methyl</td>
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<td>Carbaryl</td>
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<td>Demeton-methyl (metasyx)</td>
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### Additional Information

- **Phosvel (Leptophos)** leaked from a plant in Bayport, Texas in 1976 where it was being produced. Exposure to the chemical turned those who were contaminated into living vegetables—unable to move or think by damaging the nervous system. Palestinian farmers are still purchasing and using Leptophos.

- The chemicals **2,4-D** and **2,4,5-T** are components of the infamous Agent Orange which caused so much destruction and grief in Vietnam and to American veterans who were exposed to it. Victims of these chemicals suffer a variety of life threatening symptoms including cancers, but worse is the effect it may have by causing deformities of fetuses. The agents 2,4-D and 2,4,5-T also leave behind a more damaging threat in the soil: they break down leaving behind small amounts of a much more deadly by-product, Dioxin. Even in small amounts, Dioxin is the most toxic substance known to humans and it remains in the soil long after it is applied.

- **Parathion** is another very powerful chemical in use by Palestinian farmers. Parathion acts on the nervous system and can cause instantaneous paralysis. Accidental poisonings by this chemical have been reported from all over the world, including 67 people in Syria in 1958. Most developed nations have banned and/or severely restricted the use of Parathion. Parathion is an organic phosphate but one of the most deadly family of chemicals. Doctors must wear gloves when treating poison victims to prevent their

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*The products marked with an asterisk have been suspended, cancelled, restricted, and/or banned in most developed countries.
own contamination and the clothing of the victim must be carefully disposed.

- Organic phosphates belong to a class of agents developed by the Nazi Germans in World War II as nerve gas. There is not a little irony in the Israeli manufacture and/or supply of these particular chemicals to Palestinian farmers. They work in the body by destroying the chemical transmitters between nerves. The nerves continually "fire", causing spasms, convulsions and eventually death. Organophosphate insecticides have also been linked to such mental diseases as schizophrenia and severe depression. There are much safer alternatives to these chemicals. That the Israelis permit the continued use of parathion without re-provisioning with safer chemicals in the Occupied Territories appears to be a grave violation of human rights.

Because it only requires a slight alteration in the chemical structure and the concentration to turn an organophosphate into a deadly nerve gas, the production and use of these chemicals by the Israelis pose a threat to the peace and security of the region. Libya was bombed because of suspicions that the Libyans were developing chemical weapon capabilities. The prevention of the proliferation and the bilateral removal of all chemical weapons from Arab and Israeli arsenals is critical to any long term peace agreement.

In the meantime, the use of these chemicals as pesticides may already have been detrimental to human populations. Insufficient study has been done to identify the degree of risk and the damages that have been done to Palestinians (and Israelis) from these chemicals. Scientists and health workers are beginning to become alarmed at the recent rise in cancer rates in Gaza. Much more research is needed in this area to determine the exact cause.

Another disturbing thought occurs when one considers the fact that many Palestinian towns and villages have little or no sewage disposal. Many of the chemicals being used are known to recombine when they come into contact with organic chemicals like those found in sewage. There is a potential that a deadly chemical stew is being formed that may be an ecological time bomb waiting to go off. All three of the aquifers underneath Israel/Palestine are interconnected. If these chemicals pollute one aquifer, in time all the aquifers will eventually be contaminated, without regard to whether Arabs or Jews are drinking the water.

Settlements and the Cycle of Degradation of the Land

In reality, the Israelis have limited water, limited land, toxic waste, chemical waste, nuclear waste (?), soil salination, and a mental concept that the land has no carrying capacity and can continue to absorb Jews from all over the world indefinitely. Their stated goals are to increase new Jewish immigration by at least 100,000 people annually. Despite protestations and slow downs, settlement building continues.

The cycle begins with the confiscation of Palestinian lands to provide for the Israeli settlements. There are a variety of Israeli laws which allow for such confiscation. The Israeli Land Acquisition Law of 1953 requires Palestinians to continuously occupy their lands. In addition, the Emergency Land Acquisition Law of 1949 allows for the permanent confiscation of "abandoned" Palestinian land. These laws are supplemented by Emergency Regulations on the West Bank which have the same effect of preventing land from ever resting or lying fallow. Palestinian traditional agriculture practices allow for periods of fallow to allow the soil to recuperate from intensive agricultural use. By preventing fallow, the Israelis are forcing Palestinian farmers to use more chemical fertilizers and pesticides to maintain their yields.

Often in the occupied territories, land is also confiscated for "military security reasons", and practically any area can be arbitrarily designated a closed military area for the exclusive use of Israelis. This military area is then available for Israeli settlement. The blowing up of houses as a form of mass punishment also provide new open spaces for settlements.

Once the land is acquired, houses and buildings are constructed and water is obtained for the settlement. While Israelis have almost unlimited access to water for their settlements, Palestinian access to water is increasingly regulated and curbed. Israelis bring in modern equipment and dig deep wells that draw down the water table in the surrounding areas, including Palestinian towns and villages, while Palestinians are denied the right to dig new wells to obtain badly needed water.

All these practices have the effect of severely decreasing the quality of life for Palestinians. The lack of adequate sewage and solid waste disposal and the possible misuse of chemicals further degrades the land and the quality of life.

Confiscation of land and crowding of Palestinians into camps and villages also takes a toll on the environment, as well as the people. The United Nations recognizes human poverty as a major cause of environmental degradation. Palestinians pay taxes and labor long hours to be maintained in a perma-
rent state of poverty and underemployment. All the while, in blatant disregard for United Nations declarations and United States policy, the Israelis continue to build settlements and/or otherwise encourage Jewish settlement of the Occupied Territories.

There is a word for the action a government takes when it forces a native people to destroy their own land—it is ecocide. Palestinians are increasingly forced into ecocide in order to survive on a daily basis. The long term effects of ecocide are devastating to people and the land. Whether the Israelis use the ecological bullets of sewage contamination or real and plastic bullets, the impact is the same. The irony here is that ecological bullets cannot be aimed and they have a tendency to backfire.

In Gaza, exposure to sewage waste has caused diseases like cholera and yellow fever to become endemic in the Palestinian population. People then act as a reservoir for potential epidemics which can strike others outside of the camps. Toxins in the soil also migrate beyond the boundaries of the camps in the rain water runoff. It becomes apparent that despite their animosity to the Palestinians, Israelis cannot deny that like the rest of us on earth, they are inextricably bound to their Arab populations in ways they may not have previously considered. The “humane treatment” of the Palestinians may be a basic requirement for their own long term survival.

A Call to Action

There is a great need for education on Middle Eastern environmental issues. The majority of the hundreds of existing international environmental groups are woefully unaware when it comes to the Middle East. The bad news is that even when they are informed, it is often difficult to get these groups to address Middle Eastern environmental concerns. Given the volatile issues involved in the Middle East, many of these environmental groups are not willing to raise these issues unless pressured to do so by individuals who will get actively involved.

The good news is that educating individuals on these environmental issues is one of the most powerful ways to spread understanding of the Palestinian/Israeli conflict. People who would not otherwise be interested in international issues may listen when it comes to the environment.

Palestinians are not generally protected or recognized as an indigenous people. The world seems lacking in the recognition that, like other native peoples, Palestinians are descendants of the original populations of Palestine. Palestinians themselves need to cultivate greater awareness of what it means to be an indigenous people in order to preserve their heritage and traditions. Palestinians also need to share that culture with others to a greater extent in order to foster understanding.

Palestinian history parallels in some ways the story of the native Americans and the pilgrims. By Palestinian accounts, the first Israeli settlers that established settlements at the turn of the century, “couldn’t grow an onion”. Coming from European urban centers, it was Palestinians who often taught the Jewish settlers the rudimentary concepts of farming. Today, Palestinian agriculturists still have more to teach about dry land farming methods, rock terracing and multicropping—age old techniques which have become the latest alternatives to high water, fertilizer, and pesticide usages.

As Palestinians are increasingly becoming more educated, modernized and urban, there may be formation that Israelis could share if the gulf between the two peoples were not so great. The first lessons of ecology have to do with the co-dependency of all living things. Nature’s laws concerning co-dependency make a farce of human attempts at apartheid. When Israelis exclude Palestinians from sleeping over night in Tel Aviv or restrict Palestinians to Arab enclaves, nature makes them both dependent on the same shared natural resources. Ecological laws favor diversity and inclusivity over separation and exclusivity. In nature, the process of natural selection acts against the lone animal and the lone genetic type. Sometimes we forget that natural laws may still act upon human populations too.

As to land ownership, the next time a Zionist says he is the unqualified rightful owner of the land, someone should ask him how long it takes an olive or citrus tree to mature, and what edible and medicinal plants grow wild in the hills of Palestine. The correct answers come from a long partnership with the land and are known only to the rightful indigenous population.

When it comes to environmental issues, this article has focused primarily on the Israeli/Palestinian issues. The environmental abuses found in the Arab countries and the entire Mediterranean basin cannot be condoned either. The Mediterranean has become everyone’s waste dump and is an endangered body of water. The next generation of Mediterranean peoples will inherit this legacy and must begin to educate themselves about the environment.

The same Palestinian children who are using the stones nature provides to vent their anger at occupation will be left with an incredible task of salvaging the land. Palestinian and Israeli children need to be educated in the lessons of the past. Some areas of Southern Iraq
cannot be farmed today because of high soil salinity caused by the over irrigation of the ancient Babylonians. All our modern technology cannot undo that ancient folly.

If modern day Israelis are creating a wasteland in the name of making the desert bloom, no amount of propagandizing will undo the damage. Based on the soil salinities, the improper waste disposal, the coastal ground water contamination with salt and nitrates, the destruction of villages, the rapid eutrophication of Lake Tiberias, and the entire restructuring of regional water flow—it is safe to say that the Israelis have caused more ecological damage to the land in the last 40 years than the Palestinians did in 4000 years. In their attempts to modernize, the Arab countries may be rapidly following suit in their own lands.

The “powers that be” have scheduled the talks on environmental issues for the last rounds of the peace talks. The issues of water and the environment are the thorniest issues facing the region. For example, Israel is already hinting that the water of the Golan Heights should be negotiated separately from the land—intimating that even if they returned some or all of the Golan Heights they would retain the water rights. It does not take mystical powers to predict the highly likely event of future wars over these issues.

The security reasons stated for Israel’s continued occupation of the southern part of Lebanon also mask Israel’s need for Lebanon’s water resources. The Israelis have just demonstrated the extent they will go to maintain control of Southern Lebanon by an incredible show of force. Israel’s latest escalation of violence created an estimated 500,000 refugees. One Arab commentator described parts of Southern Lebanon after six days of intensive Israeli shelling as resembling a “lunar landscape”. Denuded, crater-marked landscapes remain in the wake of the shelling. Which will take longer to heal—the environment or the human social and economic problems resulting from this violence?

All the problems generated by conflict and war will not be easily solved. Holistic answers are needed that integrate solutions for this human generation with environmental preservation for future generations. Somewhere in the battle and the bloodshed of this generation, the suffering of future generations is omitted. In war, water is contaminated, land is torn up, trees and villages are destroyed and these actions have consequences that last far beyond the cease-fire and peace negotiations. People continue to suffer the environmental consequences of war long after peace is made.

Americans may have the tendency to look at the problems in the Middle East as a foreign problem. It is easy to imagine that the environmental and human problems in the Middle East lie halfway around the world. But it is our tax dollars that help maintain Israel’s settlements and war arsenal. Western war chests and arms dealers have gotten fat by selling weapons of destruction to all the parties in the region. Above all, it is primarily America’s resource use policy which makes us dependent upon Arab oil that has led to such tragedy in the Middle East. Democracy might have swept the region and Arab and Israeli come to a peaceful settlement long ago if maintaining the status quo was not so vital to our western resource interests.

In the end, saving the Moshit may not be anyone’s priority. But sometimes, a small seemingly insignificant species acts as an indicator of the state of the environment. If it ceases to exist, a chain reaction ripples through the land. The Moshit may be sending a warning that ecological collapse could come rapidly or sneak up slowly while everyone is looking at other issues. Humans are bound through the food chain to the other species on this planet and their loss eventually diminishes our quality of life. While this generation of Arabs and Israelis fight over and negotiate the land, the environmental consequences of their actions may be destroying the very thing they both covet.

Sources
□ THE POLITICS OF ISLAMIC RESURGENCE THROUGH WESTERN EYES: A Bibliographic Survey
By A. Yousef & A. Abuljubain, 1992, 199 pp., paper.
List: $14.95; AMEU: $12.95

□ NO TRUMPETS, NO DRUMS: A Two State Settlement of the Israeli-Palestinian Conflict
Based upon an intense debate between two prominent scholars—one Israeli and one Palestinian—this book may foreshadow future negotiations concerning borders, water, Palestinian refugees, Jewish settlers and security arrangements.
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□ DELIBERATE DECEPTIONS: Facing the Facts About the U.S.-Israeli Relationship
By Paul Findley, Lawrence Hill, 1993, 348 pp., paper.
The author of the best seller "They Dare to Speak Out" now speaks out himself against those whom he accuses of deliberately misrepresenting the State of Israel by claiming that it is a democracy that shuns racism, that it treats all its citizens equally, that it promptly pays its debts to the U.S., that it is vital to U.S. security, and that it maintains strict military control over the West Bank and Gaza because Palestinians there want to destroy Israel, and that Israelis of today have inherited God-given privileges from the Israelites of biblical times.
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□ ORIGINAL SINS: Reflections on the History of Zionism and Israel
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□ PERSONAL WITNESS: Israel Through My Eyes
Abba Eban, Putnam, 1992, 671 pp., cloth.
Distinguished Israeli statesman offers impassioned call for a Palestinian state: "The idea that rational freedom is indispensable for Bosnia-Herzegovina while military rule is reasonable for the Palestinian people defies all logic."
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**A HISTORY OF THE JEWS IN AMERICA**
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**THE SEVENTH MILLION: The Israelis and the Holocaust**
Tom Segev, Hill and Wang, 1993, 593 pp., cloth.
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EXPULSION OF THE PALESTINIANS: The Concept of “Transfer” in Zionist Political Thought, 1882-1948
Nar Masalna, Institute for Palestine Studies, 1983, 235 pp., paper.
Based mostly on declassified Israeli archival material, the author, an Israeli Arab, documents how “transfer”—a euphemism for expulsion—has always been an integral part of Zionist aims to “clean the land” of its Arab inhabitants in order to make Palestine “as Jewish as England is English.” Prominent in implementing the aim was Yitzhak Rabin, Israel’s current Prime Minister, who just recently expelled over 400 more Palestinians.
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EXPULSION OF THE PALESTINIANS
Palestine Problem

PUBLISHING INFORMATION

One of the best studies of the international legal aspects of the Palestinian issue is found in THE PALESTINE PROBLEM IN INTERNATIONAL LAW AND WORLD ORDER by Tom and Sally Malison. AMEU thought so highly of this 56-page work that we bought all remaining copies, which means that we can offer it for $7.50. (Published by Longmans in England, it’s retail cost in the US is $9.50)
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THE COLONIZATION OF PALESTINE: Lost the Civilized World Forgets. This is the complete list, along with maps, photos and introductory essays, of all 394 Palestinian cities, towns and villages destroyed by Israel.
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WITH FRIENDS LIKE YOU: What Israelis Really Think About American Jews
A former editor of the Israeli daily Ha'aretz claims that U.S. Jews have no right to criticize Israel because what they give Israel (money) only works against its interests, and what they fail to give (their sons and daughters to the Israeli army) weakens Israel. Only the U.S. Jew who packs up his family and moves to Israel is a true Zionist, claims Golian, for only in Israel can Diaspora Jews find a secure future. This is a provocative look at the essence of Zionism.
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