

From Swords to Plowshares

A Political Ecology Perspective of Zionist Redemptive Agriculture in
Israel/Palestine

*" They shall beat their swords into ploughshares, and their spears into pruning-hooks;
nation shall not lift up sword against nation, neither shall they learn war any more."*

– Micah 4:3

Samantha Petty
12/15/06
Geography Senior Seminar
Macalester College

Table of Contents

INTRODUCTION p. 3

- Methods p. 4
- Definitions of Concepts/Terms p. 5
- Literature Review p. 6
- Historical Background p. 6

PHASE I

- Diaspora Communities and Early Zionist Thought p. 7
- The Development of a Degradation Narrative p. 12
- Jewish Agricultural Settlement p. 14
- Evaluation of Early Zionist Impact on the Land and People of Palestine p. 18

PHASE II

- The British Mandate and Jewish Land Purchase p. 23
- The Emergence of A Jewish Defense Ethos p. 26
- Evaluation of Zionist Impact of the Land and People of Palestine p. 26

PHASE III

- War of Independence p. 27
- Israeli Agricultural Expansion p. 29
- Hula Valley p. 29
- Evaluation of Israeli Impact of the Land and People of Palestine p. 31

CONCLUSION p. 32

“They shall beat their swords into ploughshares, and their spears into pruning-hooks; nation shall not lift up sword against nation, neither shall they learn war any more.”

–Micah 4:3

Introduction

In the last hundred years, the tiny region of the world known as Israel/Palestine has undergone tremendous demographic, political, and physical change. Mass media tends to focus on the first two trends. However, the forgotten third factor, the physical transformation of the land itself has been equally, if not more, important than the other two in the creation and continuation of the Palestinian/Israeli conflict.

I begin with this quote because it encompasses all three central themes that have accompanied the creation of the state of Israel: war, religion, and agriculture. This biblical quote can be found proudly displayed on the streets of Israel. It is hung on synagogue walls, waved on banners in the streets, and predominantly exhibited at entrances to kibbutzim, or collective Jewish farms. It is a quote which draws on the imagery of an active creation of peace. The idea that tools of war can be transformed into tools for agricultural livelihoods is a powerful one. Yet, it is dangerous to assume that war can only be carried out with swords. Wars can be fought using a broad arsenal, including the weapons of oppression, racism, economic sanctions, and finally, agriculture.

What does it mean to beat a sword into a ploughshare? Does it signify an end to violence? This question is relevant when studying the inception, evolution, and outcomes of Zionist agricultural settlements. This paper focuses on the political/messianic Zionist movement and how it influenced the relationship between the Jews immigrating to Palestine and the land itself. The interactions between the Zionist and the local Arabs living in Palestine are also studied. The concepts and tools of Political Ecology are used in order to understand the

connections between the physical land of Israel/Palestine and the politics and religious debates surrounding it. Moreover, by examining the development of messianic Jewish agriculture through a Political Ecology lens, areas in which Political Ecology has little to offer are highlighted. Therefore, this paper also is a call for Political Ecologist to study the realm of religion and the complexities of the 2nd world more closely.

Methods

This paper is guided by four core research questions:

- How did the narratives surrounding the Jewish settlement of Palestine shape their relationship with the Arabs living there?
- How did the agricultural practices of the Jewish pioneers differ from those already in place? How did these differences play a role in justifying Jewish ownership of the land?
- How does the lens of Political Ecology help us to better understand the interaction between Jewish pioneers and the native Arabs?
- How does the inception of environmental movements in Israel change the discourse surrounding the birth of Israel?

For the sake of clarity, the research presented here is restricted to certain time periods in the long history of Zionism. It begins with the Zionist philosophy of messianic agriculture from its inception up to the 1948 War of Independence that produced the state of Israel. This time period was selected because it was integral in shaping Jewish thought concerning both the land of Israel and the Arabs that lived there. In the conclusion of the paper modern Israeli environmental movements and urges are incorporated to give the reader an understanding of how early Zionist thought continues to play a role in land management and development in Israel.

The paper is divided into three phases. The first phase encompasses the development of Zionist philosophy and Jewish immigration to Ottoman Palestine. The second phase takes place under the British Mandate. The third, and final, phase includes the 148 War of Independence and

the shift to Jewish severity. In each of these phases, the impact of Zionism on the land and on the local people of Palestine will be evaluated.

Definition of Concepts/Terms

A brief note on the definitions of terms that commonly appear in this paper:

Zionism - The Shorter Oxford English Dictionary defines Zionism as “A movement for [originally] the reestablishment of a Jewish nationhood in Palestine, and [since 1948] the development of the State of Israel.”

Messiah - Literally “anointed one,” referring to ancient prophets who were anointed in oil. Usually signifies a royal descendant of the dynasty of David who will bring an age of redemption, peace, justice, and plenty to the land. The term has branched off in many directions, including ideas of mystical new beginnings and ideas of political radicalism that are strongly grounded on this earth. There have been many Jewish messiahs who are either considered false or failed. (Jewish Virtual Library, 2005)

Pogrom - Stemming from the Russian word for devastation, a pogrom is an unprovoked violent attack on a Jewish Community. (Jewish Virtual Library, 2005)

Wilderness - This paper recognizes that wilderness is a human creation: “far from being the one place on earth that stands apart from humanity, it is quite profoundly a human creation- indeed, the creation of very particular human cultures at very particular moments in human history.” (Cronon 1996, p. 7)

Political Ecology - The connections between poverty and wealth, environmental degradation, and the political process. The systematic ways in which the environment acts as a political and economic conduit between social groups. (Bryant and Bailey 1997, p. 8)

Literature Review

A Zionist hydrologist living in Palestine in the mid nineteenth century once described the land of Israel as a land with a political conscience. (Tal, 2002, p. 97) The idea of a land with a conscience, moreover a *political* conscience, lends itself well to the study of political ecology, a subfield of Geography, in which politics and land are intimately connected. However, there has been no research in the field of Political Ecology that has focused on Israel. Perhaps this because Israel resides awkwardly in the '2nd world,' a space not often examined by political ecologists. Scholars of this field prefer to focus their efforts on examining the effects of 1st world and 3rd world interactions on local environment and populations. Moreover, there has been little Political Ecology that has dealt specifically with religion as a force that influences land use and politics.

In my research, I relied on scholars of Environmental History, Historical Geography, Philosophers, Scholars of Religion, as well as Jewish Historians and Palestinian Specialists. In the realm of Political Ecology I drew on the concepts of Paulo Freire on oppression, James Fairhead and Melissa Leach on degradation narratives, William Cronon on wilderness, and Paul Robbins on ultimate versus proximate causes. These concepts greatly enhance the study of this topic.

Historical Background

A key concept for the understanding of this paper is how the Jews left Israel in the first place. The history of Jewish exile goes back to the Roman-Byzantine period in Israel, which spanned 70-638 C.E. During this period, the Jewish people suffered under the rule of the Roman

Empire. A messianic figure, Bar Kosiba, led a revolt against the Romans in 131-135 C.E. The Romans violently put down the revolt and most of the Jewish population was enslaved and/or exiled to other parts of the Roman Empire. This punishment is generally recognized as the creation of the Jewish Diaspora. Although, a small portion of the Jewish population remained in Israel the majority of Jews were scattered around the world. In this way, Jewish communities appeared all over the world. (Jewish Virtual Library, 2006)

PHASE I

Diaspora Communities and Early Zionist Thought

“Yiddish has almost no flowers...”(Smith, 1993, p. 107) Yiddish, the language of European Jewry, is simultaneously a language of isolation and of assimilation, a shifting mixture of Hebrew and assorted local tongues. Its vocabulary starkly reflects how the Jews lived in Europe. This quote is the lament of the loss of a relationship between Jews and the natural world. History has so uncompromisingly separated the Jewish people from the land that their language no longer even sustains the vocabulary with which to speak of the beauty of their surroundings.

This lack of vocabulary stems from a systematic removal of Jews from agricultural land. During the 13th, 14th and 15th centuries, Jews were forcibly driven out of England, France, and the Iberian Peninsula. Moreover, throughout Europe, Jews were forbidden to own land or practice farming. (Miller, 1955, p. 9) The Jewish people forgot their knowledge of cultivation and became peddlers, merchants, bankers, and scholars. Derek Eretz, or “the way of the land” became a concept instead of a practice. (Smith, 1993, p. 118)

In Russia, traditional religious Jews continued to live a peasant lifestyle although they were still not granted all the rights of Russian citizens. In 1894, Nicholas II became the czar of Russia. His tyrannical rule was threatened by student activism and worker rebellion. In order to

stabilize the country he began a campaign against the Jews, blaming them for Russia's economic woes. (J. Kniesmeyer and D. Brecher, 1995) His operation proved successful and in 1903, a pogrom broke out in Kishinev, leaving forty-five people dead, and 1,300 homes and shops plundered. During the period of 1905-1906, more than 600 outbreaks of violence against Jews were recorded and 3,103 Jews were killed. (J. Kniesmeyer and D. Brecher, 1995)

The Jewish community responded to the general anti-Semitism of Europe and the violent pogroms in two distinct ways. Both responses would deeply influence the Zionist movement. Some Jewish communities turned inward and became even more isolated and religious. The instability and the general loss of control over their lives caused by the pogroms was a catalyst for a rise in messianic thought among these Jews. Isaac Luria, a messianic figure, presented the theory that the Jews were scattered all over the earth in order to collect the scattered divine sparks that were lost during creation. The Jews, he explained were suffering in exile so that they could find the lost sparks in even the darkest and most evil places on earth. Eventually the Jews would bring these sparks to the Holy Land. (Smith, 1993, p. 123) This idea implanted in the Jewish community a desire to return to Israel and the theory that this return would be part of a larger messianic movement.

Another messianic leader, Rabbi Zvi Yehudah ha-Cohen Kook (1891-1981) expressed the religious undertones of a return to the land of Israel. He describes the return to Israel as "messianism without a messiah" He writes: "The End is being revealed before our very eyes... The End is here!" the end meaning the coming of a new messianic era through immigration to Israel. (Ravitzky, 1993, p. 81)

In contrast to these messianic hopes, other Jewish communities gave up their traditional ways sought a new era of freedom and peace through assimilation into European society. Secular

Jewish intellectuals embraced the ideas of emancipation, enlightenment philosophy, and nationalism. The Jewish enlightenment of the second half of the eighteenth century, that would later influence Zionist thought, was directly a product of European enlightenment. Enlightenment glorified the importance of the individual and the human being. It sought to free the individual from the constraints of history, social status, and religion. (Goldstein, 1991, p. 80) These ideas gave upper class Jews had great hopes for their freedom and assimilation into European society. (Ettinger, 1982, p. 201)

As these Jews struggled to become part of European society, in order to escape discrimination, they came into contact with other European philosophies. Both the ideas of rationalism and the Romantic tradition were adopted by European Jews. Romantics glorify the natural world, untouched and uncorrupted by human hands while rationalists venerate the human ability to control and enhance nature. Although these ideas seem almost dualistic, these conflicting traditions melded together and became entrenched in the Zionist ethos even as they were left behind in Europe. (Tal, 2002, p. 24)

An influential economic theory of 18th century Europe that certainly played a role in the development of Zionist thought was the ideas of physiocratic philosophy. Physiocrats identified land, farming, and productivization as the central generators of wealth. An influential book written in 1828 in Eastern Europe connects these ideas to the Jewish people. The author Isaac B'er Levinson explains:

“At one time following the plough was the most honorable pursuit and princes and kings tilled the soil. The examples are many: Gideon, Saul, and others. Not only does the Jewish religion not object to farming, it propounds it and commands that it be undertaken. In ancient times the people knew nothing of commerce and they undertook this occupation only because of the Exile and the persecutions.” (Goldstein, 1991, p. 81)

This quote sets the framework for latter Zionist thought that drew on religious roots to embrace agriculture as a form of Jewish redemption.

A final noteworthy philosophy was the doctrine of the Russian Narodnik movement. The Narodnik movement shared many ideals with the Marxist movement. However, Narodniks view the agricultural worker instead of the industrial worker as the catalyst for social change. Moreover, this movement disregarded land tenure and ownership. It insisted that land belonged to the farmer who worked it. Ownership was earned with hard labor and sweat. (Goldstein, 1991, p. 87). These ideas are repeated almost word for word by later Zionists when they speak of land ownership in Palestine.

Just as the pogroms made it impossible for the traditional Jews to continue to live in Eastern Europe the secular Jews soon became discouraged. Anti-Semitism, it seemed, pervaded even the most enlightened societies. The Dreyfus affair, in which France falsely accused an assimilated Jew of leaking information, convinced many secular Jews that despite their best efforts they were not safe in Europe. The combination of pogroms and the loss of trust in European governments began to cause these two disparate groups of Jews, secular and religious, to come together under the common banner Zionism and immigration to Palestine. By 1918, more than 30,000 Jewish immigrants had made their home in Palestine. Between 1919 and 1923 Jewish population in Palestine rose to 100,000. (Kamen, 1991, p. 33) The religious nature of their immigration was reflected in the name they gave themselves: *olim* meaning those that have ascended in Hebrew. (Tal, 2002, p.28)

The Jews who immigrated to Palestine did so for a wide variety of reasons and when they arrived, pursued equally diverse lifestyles. However, religious and secular Jews were united by the ideas of A. D. Gordon, a vegetarian with an impressive beard, who believed that salvation

could be achieved through personal acts and relationship with nature, considered a cross between Baal Shem Tov, a ultra religious leader, and Tolstoy. (Tal, 2002, p. 22) Gordon's writing speaks of a return to a life of labor in religious terms:

“It is life we want, not more and no less than that, our own life feeding on our own vital sources, in the fields and under the skies of our Homeland... We want vital energy and spiritual richness from this living source.” (Smith, 1993)

“[We are] a people that is entirely severed from nature; that for two thousand years has been immured between city walls... We are bereft of work, not work out of necessity but work that man is linked to organically, naturally and by which the people is attached to its own soil and its own culture, which grows out of its own earth and its own toil.” (Goldstein, 1991, p. 87)

-A. D. Gordon

With the addition of A.D. Gordon, the use of Political Ecology in analyzing Zionism begins to make sense. Here is a political movement based on agricultural practices. One of the first Political ecology theories that is appropriate to study is not written by a Political Ecologist. Paulo Freire wrote *Pedagogy of the Oppressed* in 1968 and in it discussed how oppressed people often internalize the ideas of their oppressors and attempt to emulate them. As the Jews began immigrating to Palestine and interacting with the local population there it is relevant to wonder whether they exhibit this symptom of oppression.

Jewish immigrants brought hardly anything with them to Palestine except the ideas and philosophies discussed above. It would be simplistic to assume that the Jews of Europe had simply internalized the colonizing philosophies and narratives of their European oppressors and inflicted these oppressive ideas on the resident population of Palestine. Although, the Jews interacted with European thought, and surely did internalize much of their oppression, Zionism is primarily a messianic religious movement disconnected from European colonialism. Zionism desires to change the idea of the ingathering of exiles to the land of Zion from a metaphysical

hope to a worldly redemption. The goal of this uniquely Jewish religious philosophy was to transform the 'Chosen People' into normal people through labor on the land, and bring about a national reawakening and redemption. (Ravitzky, 1993, p.10)

The Development of a Degradation Narrative

Gradually a Zionist narrative concerning the relationship between the land of Israel and the Jewish people began to develop. The Ghetto Jew who had no language to express his or her love of a particular flower in Europe, was fluent in the language of the flora and fauna of Palestine from having read about it in the Torah and in writings by the sages and Rabbis. The descriptions were always overflowing with images of intense fertility: "Grapes as big as calves; cabbages so large that the stalk of one serves as a ladder." (Smith, 1993, p. 115) In stark contrast to these images, the land the immigrants saw when they arrived in Palestine was primarily desert. Sense it was impossible that the Torah and the Rabbis could be incorrect or lying a series of questions was raised. What had happened to the land? It had clearly been degraded in their absence; degraded in an unnatural and humiliating way just as the Jewish people had been degraded. In 1944, Maurice Samuel, an acclaimed Jewish author, eloquently expressed this common belief in his writings of his visit to Palestine:

"I dwelt on the sheer physical characteristics of the land, as I saw them there and then, a hint of the unusual stole into my mind. Without knowledge of history, I could have told that the desolation I surveyed was not native to the place. The crumbled terraces on the hillsides bore witness to a time when men had found their cultivation profitable. In certain areas, the rich black soil stopped abruptly, not at a natural boundary of recalcitrant rock, but to disappear under a blanket of sand, which wind and drift had spread over its fertility. There were gloomy marshes, habitations of disease, avoided even by birds in their flight, bearing similar witness to human neglect rather than the harshness of nature." (Samuel, 1944, p. 9)

This description marks the beginning of a degradation narrative formulated by the Jews about the land of Israel. In their 1995 article "False Forest History, Complicit Social Analysis: Rethinking some West African environmental narratives," Political Ecologists Fairhead and

Leach explain that such a degradation narrative can justify the conquest of a land because the conquerors justify the removal of the local population in order to save the land. They also discuss the ideas of a romantic vision of “original climax vegetation” that leads to misconceptions of degradation and therefore, a misconstrued imperative to intervene. The Zionists certainly thought they knew what the “original climax vegetation” of Palestine looked like. Zionist leaders expressed that “The land was to be reborn through the labor of the people; the people were to be redeemed by their labor on the land.” (Kamen, 1991, p. 47) Jewish redemption would come through returning the land to its Holy State as it is described in the Torah and by the Rabbis. (Kark, 1990, p. 42) The Zionists embraced the biblical idea that the land of Israel will only bear fruits for her chosen people. (Ettinger and Bartel, 1982, p. 201) These ideas were reinforced with the renewal of Jewish Holidays celebrating agriculture like Sukkot and Tu’ Bishvat. (Kark, 1990, p. 158)

Fairhead and Leach’s ideas are helpful in understanding the Zionist reaction to the land of Palestine but they do not fully explain the Jewish narrative of degradation. This narrative was one of an oppressed people. By seeing the land as degraded the Jews were able to equate the land with their own state as a people. Hence, in order for the degraded Jewish people to be able to redeem themselves through their work on the land, as explained by A. D. Gordon, the land had to also be degraded. Thus, this degradation narrative was less about a justification for land ownership, than it was about the remaking of the Jewish people.

This did not make the narrative any less damaging for the local Arabs. Instead as being seen as a people separate from the land, the Arabs were often seen as part of the flora and fauna, or worse completely ignored, by the Zionists. The fact that the Arabs were seen as the degraders simply weakened their claim on the land.

This skewed view of the local population was adopted into the Zionist redemptive agriculture narrative in ways that had negative consequences for both population, Jew and Arab. As the Messianic narrative evolved a language of conquest was adopted. The Jews, so long a conquered people were to become conquerors. Here we can see some of the effects of internalized oppression explained by Freire. The Jewish homeland had been ruined, and the land must be overcome and brought back to its original state. Ben Gurion, who would become Israel's first Prime Minister, referred to himself and fellow settlers as "a company of conquistadores" who would reclaim the land and bring about Isaiah's prophesy: "The desert and the parched land will be glad; the wilderness will rejoice and blossom." (Gurion, 1945, p. 9)

The language of conquest applied to the land's inhabitants as well as the land itself. As the narrative grew the Arabs were considered part of the unnatural aspect and degradation of the land and must also be overcome. (Kamen, 1991, p. 8) Palestine was a land whose people had allowed it to fall into ruin and, therefore, their claim to possession of it was weaker than that of the Jews who earned the land by the sweat of their brow. (Kamen, 1991, p. 99) Here one can see how the Narodnik philosophy is applied.

The State of the Land of Palestine

Because the degradation narrative began to shape the relationships between the Arabs and Jews it is now essential to answer the questions posed by the Zionists. What had happened to the land of Israel? Had the Arabs degraded it? To answer these questions I will provide some historical background on the region. Then I will analyze the situation relying on Cronon's theory of wilderness as a construct and Robbin's ideas of ultimate causes.

First, it helpful to understand who the Zionists encountered when they arrived in Palestine. Palestine hosted at least nine different ethnic and religious groups including Sunni Muslims,

Druze, Christians, and Bedouins. Muslims and Bedouin made up the majority of the population, which did not even reach 400,000 people. (Tal, 2002, p. 48)

At the time of the 1st and 2nd Aliyah, or major waves of Jewish immigration, Palestine was ruled by the Ottoman Empire. The land in Palestine was state property and leased to dignitaries who in turn leased to peasants and collected taxes and a share of their crop. The Arab peasants primarily practiced subsistence agriculture with no market contact. (Kamen, 1991, p. 103) After the Crimean War Palestine was integrated into the capitalist, international, European dominated world market. (Kamen, 1991, p. 109) The main crops were cereals, which were grown with no irrigation in a process called dryland farming. Farmers were dependant on the weather for the successes of their crops. Wheat and barley were grown both for subsistence and market production. (Kamen, 1991, p. 196)

This description of Arab livelihood in Palestine is not unique from Arab livelihood anywhere in the Middle East, yet it is vastly different from what the Jewish immigrants believed the land should look like. To understand this discrepancy it is helpful to frame it with Cronon's ideas of constructing wilderness.

“As we gaze into the mirror [wilderness] holds up for us, we too easily imagine that what we behold is Nature when in fact we see the reflection of our own unexamined longings and desires.” (Cronon, 1996, p. 7)

This quote is relevant because to comprehend the gap between what the Jewish immigrants saw and what they believed should be on the land, it is more essential to examine the “longings and desires” of the Jewish people than the supposed agricultural shortcomings of the Arab population. As discussed earlier the Jews had felt exiled from not only their homeland in Israel but from all land everywhere. However, when Jewish writers and thinkers were formulating these ideas they were living in Europe. This meant that they often based their descriptions of the

land the Jews were exiled from not on the land of Israel, but instead on the more familiar landscape of Europe. Through poetry and other forms of writing these images of European landscape were eventually imposed upon the land of Israel in many Jewish minds. A poem by Micah Joseph Lebensohn, a well known European Jewish poet of this time period serves as an example:

“Once in a leafy tree, there was my home.
Torn from a swaying branch friendless I roam.
Plucked from the joyous green that gave me birth,
What is my life and of what worth?”
-Micah Joseph Lebensohn

This poem illustrates the green leafy imagery forced on Israel by European Jews. (Tal, 2002, p. 19) From these ideas one can conclude that part of the degradation the Jewish immigrants saw when they arrived in Palestine was not degradation at all but merely a misconception of the natural landscape.

The question, then remains: Was the land of Palestine degraded at all, and if so by whom? It is actually most appropriate to begin the answer to this question with the Romans, not the Arabs. The violent Roman conquest, that had exiled the Jews also led to the desertification of much of the land. While the remaining forests would have looked quite different than what the European pioneers were accustomed to, there is no denying that a rich groundcover of diverse fauna was ruined by human activity.

The destruction of fauna continued under the Ottoman rule and the integration into the world economy. The consequence of these factors was the introduction of modern economic development: cash economy, market production, and individual land ownership. Unfortunately, these additions only exacerbated traditional peasant exploitation. Political repression, by the Ottomans remained unnecessary as economic exploitation, in the forms of high rents and high

interest loans, firmly kept the peasants down. Kamen explains that the improvement of peasant agriculture by modern methods of farming, would have involved a revolution in social relations as well as in agricultural techniques. (1991, p.135)

The agricultural year had two seasons winter, late October- mid April, which was the rainy season; and summer, when there was no rain. A three year rotation cycle of crops in the fields was common but proved ineffective at maintaining soil productively because landholdings were often so small that the fields were in constantly use. (Kamen, 1991, p. 197) The problems of small holdings limited agricultural innovation. Other contributing factors included: overgrazing and the destruction of all but 100sq km of forests due to firewood collection. Moreover, any increased income went to landlords and money lenders to pay back debt so the peasants had little incentive to improve their agricultural techniques. (Kamen, 1991, p. 213)

An Arab scholar, Professor Said Assaf, counters this purely negative interpretation. He sites the sustainable and beneficial aspects of Arab agriculture in Palestine: terracing, legume planting on shallow, nitrogen poor, hilly soils; and limited irrigation. (Tal, 2002, p. 56)

These findings demonstrate that the land was indeed degraded to some extent, suffering from deforestation and loss of soil quality. However, the degradation was probably not as drastic as the Jewish immigrants perceived. Moreover, the causes of degradation were more complex than elucidated by the Jewish narrative. The Jews looked at proximate causes within the local population. The ultimate causes were global and a product of a marginalized peasant class in a global economy. By using these Political Ecology ideas the narrative becomes much more complex.

The Zionists, of course, were not using Political Ecology and, unaware of the complexities of the land of Palestine they went about founding settlements and buying land.

Jewish Agricultural Settlement

Jewish agricultural settlement began with the first Aliyah, or wave of immigration to Palestine, that occurred from 1882-1904. These immigrants established twenty eight agricultural settlements. (Aaronsohn, 1995, p. 438) These agricultural experiments did establish a new form of communal, strong and egalitarian Jewish society. The settlers were guided by A.D. Gordon's principles of Jewish labor and European ideas of agriculture that "tamed" the land. These principles were detrimental to the land itself and to the Jews relationship with the Arabs.

Initially these pioneers could not afford the implements needed to practice modern farming techniques that they had seen in Europe. Moreover, because they had not been allowed to own land in Europe most were severely lacking in any form of agricultural knowledge or skill. The dearth of funding and knowledge forced the pioneers to rely on Arab knowledge, tools, and labor. This occurred despite their ideology of being superior to the Arabs. (Aaronsohn, 1995, p. 433) In 1882 one settler wrote:

"We looked down upon the Arabs, saying that they would not teach up but rather that we would teach them; these primitives would see what a European could do in this forsaken land using proficient tools and rational farming methods. However, the catch is that we ourselves only knew from hearsay about European farming." (Aaronsohn, 1995, p. 444)

In some ways, the Jews did manage to use European farming techniques on the land. By looking at diagrams of Arab and Jewish settlements the differing philosophies about how to farm are obvious. Jewish settlements followed strict grid patterns while Arab settlements blended more naturally into the landscape.

Figures 1 and 3 illustrate how different Jewish and Arab land settlements were. The Jewish settlement is more strictly collective and demonstrates European planning grids. The Arab settlement follows the natural landscape.

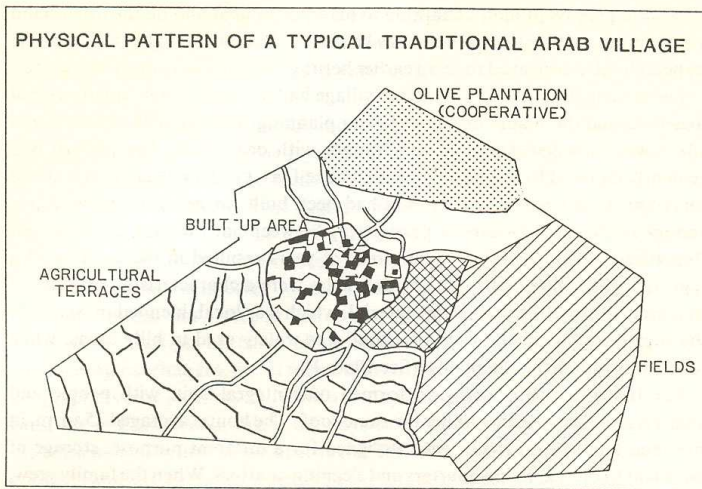


Fig. 1

(Ben Artzi, 1990, p. 136 and 143)

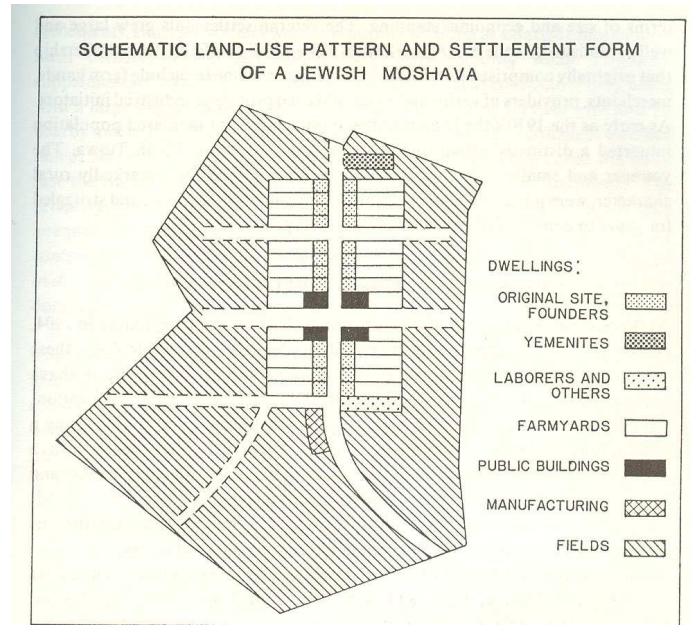


Fig. 3

Even though the Jewish settlements were planned in a European fashion, many Arab agricultural techniques were used. Jews learned and practiced traditional agriculture primarily dryland farming with no fertilizer, and limited farming implements or tools. Slowly the settlers secured financial funding from wealthy European Jews, namely the Baron Rothschild. Rothschild's support brought about a change in Jewish techniques from dryland farming to heavy irrigation, fertilization, and the use of farming machinery. Moreover, they were able to manipulate the landscape draining swamps and building dams. (Aaronsohn, 1995, p. 444)

It would be inappropriate to say that the accumulation of capital and the formation of a Jewish workforce dramatically altered the face of Jewish agriculture. An exchange of agricultural ideas continued between the Jews and Arabs. Traditional irrigation systems were mixed with European irrigation models. Both Levantine irrigation devices and wind pumps were installed on Jewish settlements. The light iron plough was another hybrid invention. It was a

combination of a traditional light wooden Arab plough and a heavy iron European plough. This new innovation was well suited to desert plowing because it did not plough the soil as deeply as the European plough but did not break as easily as the Arab plough. (Aaronsohn, 1995, p. 450) Nevertheless, while Rothschild might not have dramatically affected Jewish agriculture his funding did have a significant effect on the Jewish narrative. With secure financial support and sufficient Jewish labor, the settlers were once again able to live out their narrative of superiority over the local population. This dominance assured them their sense of entitlement to the land. When they were dependant on Arab agricultural techniques and labor they were no different from the Arabs. This was problematic because it was supposedly Arab land practices that had degraded the Holy Land in the first place. The Jews were supposed to be teaching the Arabs how to be farmers, not the other way around.

The narrative of superiority extended beyond agriculture. The Zionist narrative also described benefits for the local Arab population. The Jewish return to Palestine would allow the Arab population to improve their lot because of increased economic activity and opportunity, health benefits, an urban market for Arab produce, access to capital through Jewish land purchase, exemplary farming techniques, and a general improved economy. (Kamen, 1991, p. 70, 83-4) Jewish agricultural innovations of crop rotation, cultivation of fodder for livestock, irrigation, and crop adjustment for local climate, were cited as examples for Arabs to follow. (Kamen, 1991, p. 7) Moreover, Jews saw themselves as a form of salvation for the Arab tenant trapped in a vicious cycle of poverty by absentee landlords. Now the peasant had an alternative economy, through the Jews, and could escape their bondage. (Kamen, 1991, p. 77-79)

Evaluation of Early Zionist Impact on the Land and People of Palestine

With the inception of spread of Jewish agricultural settlements it is possible to evaluate the impact the Zionists were having on the health of the land of Palestine. In some ways these effects were overwhelmingly positive. US dept of Agriculture representative, Walter Clay Lowdremilk, conducted a study of sustainability of 24 countries in the Middle East in 1938. He was appalled by the abundance of overgrazed and degraded soil but sung the praises of the Jewish settlements in Israel. “Here in one corner of the vast Near East, thoroughgoing work is in progress to rebuild the fertility of land instead of condemning it by neglect to further destruction and decay.” (Tal, 2002, p. 55) Moreover, during this time period a love of the land was established. Early Jewish pioneers were filled with a passion to know their land intimately. To attain this level of knowledge they spent significant amounts of time hiking and exploring Israel. Furthermore, curriculum on local flora and fauna was prominent in the schooling of their children. Despite the pioneers supposed superiority over the locals, Druze and Arabs were employed to teach these classes. (Tal, 2002, p. 30) Ironically the Arabs themselves were considered simply another form of exotic fauna to be studied. (Tal, 2002, p. 32)

Regrettably, the effects of Jewish settlement were not solely positive. Natan Alterman, an early Israeli poet, illustrates the widespread modernist thinking in this line of one of his poems: “We shall build you, beloved country...and beautify you... We shall cover you with a robe of concrete and cement.” (Tal, 2002, p. 26) This type of ideology rarely bodes well for the health of the environment. After 400 years of stable population and agriculture during the rule of the Ottomans, the land of Israel saw drastic change during the 20th century. Modernization, technology, affluence, violence, war and a fourfold population jump all had negative ecological effects. (Tal, 2002, p. 36) Moreover, Jewish use of pesticides caused the extinction of fourteen native species and consequently the animals higher on the food chain are endangered. (Tal, 2002,

p. 156) Fear of rabies led to the Israeli military poisoning the majority of the country's jackals. (Tal, 2002, p. 159) These effects caused some to claim that “Two thousand years of conquerors didn’t cause the land of Israel a fraction of the damage produced by a century of Zionist settlement.” However, there is hardly a country anywhere in the world that did not exceed all existing levels of environmental degradation during the 20th century. (Tal, 2002, p. 13)

The increased degradation of the land of Palestine was not limited to Jewish settlements. The beginnings of World War I took a serious toll on the land. The Turkish army aggravated this problem by decimating much of the remaining forest cover for railroad ties in World War I. Moreover, the Ottomans actually taxed trees which sometimes led local farmers to uproot trees in order to save money. The political rule of the Ottomans was detrimental in other ways, creating a cycle of over taxation, debt, and poverty for most local Arabs. A final insult to the land came in the form of rifles. With introduction of the modern day rifle to the local people, by the Ottomans during World War I and its increased accessibility during the British mandate hunting became a popular activity, especially among the Bedouin population. The Syrian bear, the fallow deer, the crocodile, the ostrich, the cheetah, and the wild ass, all quickly were hunted to extinction. (Tal, 2002, p. 39) Because kosher dietary laws only permit the consumption of slaughtered animals, hunting is foreign to the Jews and they were appalled by the wholehearted obliteration of these animals. (Tal, 2002 p. 48)

Zionist impact of the local people of Palestine under the Ottomans was limited. The Jewish claims of increased economic activity and opportunity, health benefits, an urban market for Arab produce, access to capital through Jewish land purchase, and a general improved economy were not unfounded. The local population of Arabs did see a market increase in their living standards and a decrease in area like infant mortality. Some of these supposed benefits

never actually benefited the local population. The positive effects of Jewish agricultural innovations are exaggerated because most Arabs did not have economic capital to copy Jewish farming techniques. (Kamen, 1991, p. 46) Moreover, the Arabs became concerned about the unceasing flow of Jewish immigrants and what this would mean for them in the future. (Kamen, 1991, p. 70, 83-4)

PHASE II

The British Mandate and Jewish Land Purchase

The first major shift of power in Palestine occurred after World War I. In the subsequent division of the Middle East by European powers, the British were given control over Palestine as a colonial mandate. This power shift had immediate effects on the relationship between the Jews and the Arabs and on agriculture in Palestine. There was a scramble for power between the Jews and Arabs. Under the Ottomans, the Arabs had always had a clear superior standing. Now neither people were sure of where they stood. Furthermore, both peoples experienced a rise in national identity and nationalism during this period. The idea of an Israeli people and a Palestinian¹ people flourished under the British Mandate. (Shapira, 1992)

Underscoring this phase was a marked increase in the Jewish population of Palestine. As pogroms continued unabated and Nazism blossomed, Jewish immigration soared. By 1935 there were 375,000 Jews in Palestine. (Kamen, 1991, p. 35) Pre WWI Palestine had hosted a mere 60,000-85,000 Jews. With the total non Jewish population resting somewhere around only 720,000 people the Jewish population growth becomes even more significant. (Khalidi, 1997, p. 96) Responding to Palestinian concerns, the British write the White Paper of 1939, which limits Jewish immigration to Palestine to 15,000 Jews a year for the next five years and then declares

¹ It was around this time that the Arabs in Palestine began calling themselves Palestinians. Therefore, they will be referred to as such for the remainder of the paper.

that the Arabs should decide if it should continue at all. However, despite the White Paper, massive illegal immigration to Palestine continues by Jews desperate to escape the looming death camps of Europe. (Kamen, 1991, p. 37)

The increased Jewish population had two immediate effects. There was a massive demand for Palestinian land and a sudden drop in demand for Palestinian labor. These effects are a bit more complex than they appear. Palestinian labor was cheaper than Jewish labor and Palestinian land was expensive. However, the messianic impulse required that the Jewish people must each personally redeem themselves through labor on land owned by the Jewish community. (Hertzberg, 1997, p. 372) Money from the Diaspora community poured into Palestine to create a Jewish land trust there.

As the Zionists began to search for land to purchase the Palestinians began to resist. Their agricultural practices were already under pressure because during this time period their had population more than doubled leading to land stress. (Kamen, 1991, p. 46) As Palestinian holdings became smaller and smaller they had a harder and harder time producing enough food to survive. This led to further indebtedness to Arab lenders and the selling of land to rich Palestinian, Lebanese, and Jordanian merchants who allowed the Palestinian farmers to remain on the land as tenants. (Khalidi, 1997, p. 94) These absentee landlords, and older absentee landlords left over from the Ottoman era, were more than willing to sell land to Jews even though it meant displacing the tenants. Khalidi, a prominent Palestinian scholar describes the process as one in which an absentee landlord would sell their land to a Jewish agency and the Palestinian tenants would not even know they no longer owned the land until the landlord came to evict them. (1997, p.99) New Jewish communities usually provided monetary compensation to the displaced peasants after seeing that their former landowners were not going to help them.

However, monetary compensation did not replace the land that the Palestinian peasants had farmed for hundreds of years and on which their ancestors were buried. (Khalidi, 1997, 102)

Both the Arabs and the British foresaw drastic land shortages and displacement for the Arabs population of Palestine. They cite a general trend of Palestinians becoming more urban in part caused by their loss of land. The British decided that this trend was due to lack of land ownership, limited economic security, and excessive indebtedness. (Nadan, 2006, xxx) The government released a series of ordinances restricting the sale of Palestinian lands to Jews and limiting the ability of landlords to disposes the Palestinian peasants of land in 1929 but these ordinances were often ignored. (Kamen 1991, p. 29) Finally, the Palestinian Royal Commission Report of 1937 prohibited and limited sales of Arab lands to Jews. (Kamen 1991, p. 62)

The Jews were shocked by this report. A Jewish Agency pamphlet complained that the British are:

“apparently prepared to let an area fit for orange growing remain grazing land merely because its present occupants claim to need it for their flocks, know nothing of irrigation and because, in case of transfer, it seems likely that the tribe will lose its identity as a tribe and become a scattered community.” (Kamen 1991, p. 82)

The Zionists presented an alternative narrative to the Arab land crisis. First they claimed that there is much more land available than the British or Arabs maintained because with the use of Jewish technology much more land is appropriate for cultivation. The problem then becomes the failure of Arab agricultural practices and not Zionist land purchase. The remedy actually lies in Jewish land purchase. The Zionists encourage Arabs to sell some of their land in order to gain the capital to better farm the rest of it. (Kamen 1991, p. 57) The Jews consider these purchases and investment in Arab agriculture because if the Arab peasant had more capital he would be free to practice intensive agriculture and the carrying capacity of the land would rise and there

would be more land available for both the Jews and the Arabs. (Kamen 1991, p. 75) The future prime minister of Israel, Ben Gurion protested the British ordinances explaining:

“We do not accept the idea of a Jewish State wherein Jews rule over Arabs...It is playing with political fire to interpret messianic redemption and liberation as a lust to govern behind the bayonets of imperial Britain, condemning the right of those who are citizens of Palestine as much as we are.” (Ben Gurion, 1954, p. 38)

Whatever, the Zionists believed, the Palestinians began to develop a grassroots resistance to displacement. In 1929, the first of a series of riots broke out. Palestinians attacked a Jewish settlement killing 65 unarmed men, women, and children. (Kamen, 1991, p. 35) Although, their had been attacks on Jewish settlements before this attack brought in an era of much larger scale and organized fighting.

The Emergence of A Jewish Defense Ethos

To the Jewish settlers, many of whom had seen their families murdered in pogroms, these attacks took on a nightmarish quality. The pogroms had followed them to Palestine. Calls for Jewish resistance rose. The Jews were no longer weak as they had been in Europe, they had been redeemed by their land. They would no longer stand by and watch their children be murdered. An attack on a settlement called Tel Hai in northern Palestine was met with armed Jewish resistance. Although, most of the Jews were killed and the settlement was abandoned it was the first time the Jews had defended themselves. Tel Hai became almost mythical in the Zionists ethos and a Jewish defense force was formed. Blood was added to sweat as a way to own land and the precedent for the War of Independence was set. (Shapira, 1992, p. 100)

Evaluation of Zionist Impact of the Land and People of Palestine

During this phase, the impact of the Zionist on the land was still limited. By the end of the mandate period only 5% of Arab lands had been transferred to Jewish ownership. (Kamen,

1991, 191) In contrast, the relationship between the Zionists and the Palestinians had turned violent.

PHASE III

War of Independence

The limited Jewish impact on the land was about to change. In 1947 Great Britain declared its Mandate in Palestine "unworkable" and referred the matter to the UN.

The UN Special Committee on Palestine (UNSCOP) was formed. On November 29, 1947, the UN General Assembly, passed Resolution 181 partitioning Palestine into two states, one Jewish and one Arab. The area designated as a Jewish state as over 75% desert; it had a population of 498,000 Jews and 325,000 Arabs. The proposed Arab state area had 807,000 Arab inhabitants and 10,000 Jewish inhabitants. The international trusteeship regime in Jerusalem would have a population of 100,000 Jews and 105,000 Arabs.

The Jewish community of Palestine accepted partition. The Arab national movement in Palestine, as well as all the Arab states, rejected partition. From mid-May to mid-July 1948 Egypt, Syria, Transjordan, Lebanon and Iraq attacked Israel promising to drive the Jews into the sea. (Palestine Facts, 2006) The Jews fought back declaring:

“Wait for us, my land, In the spaces of your fields of bread.
Your boys once brought you peace by the plow.
Today they bring you peace by rifle!” (Shapira, 1992, p. 225)

The results of this war led to massive demographic change in Israel. 40% of private Arab land was taken by the Israeli army during the War of Independence in 1948. (Tal, 2002, p. 330) See figures on next page for clarification. Jewish areas of cultivation increased from 413,000 acres in 1948 to 100,000 in 1954. (Tal, 2002, p. 56)

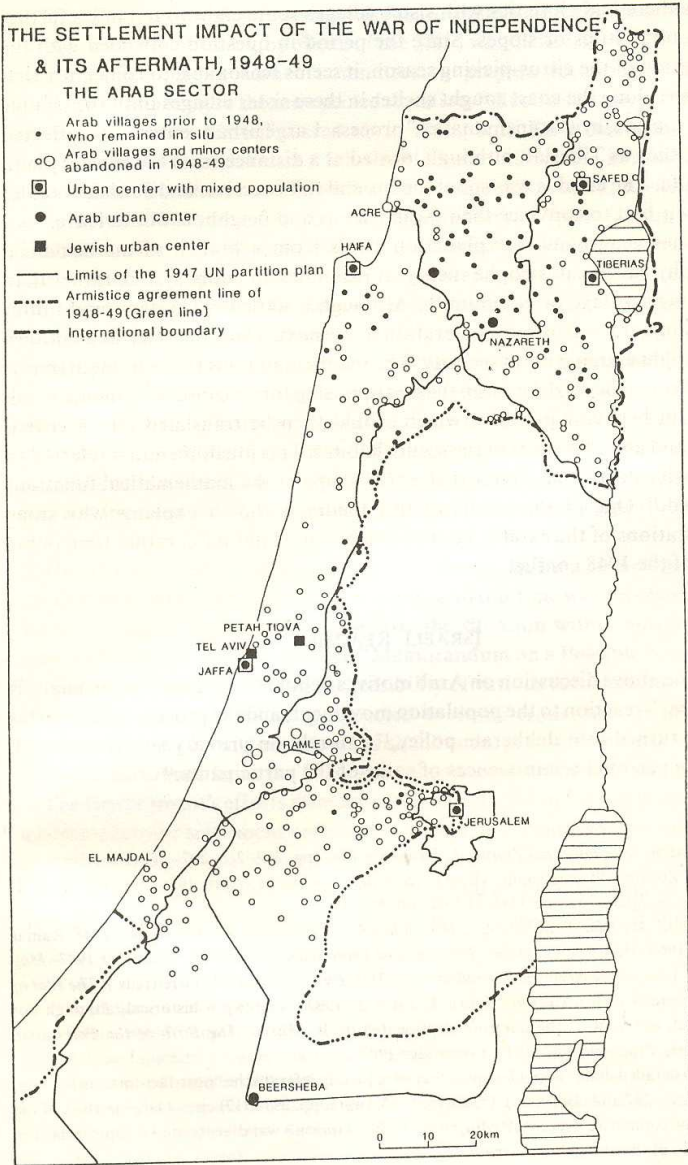


FIG. 1

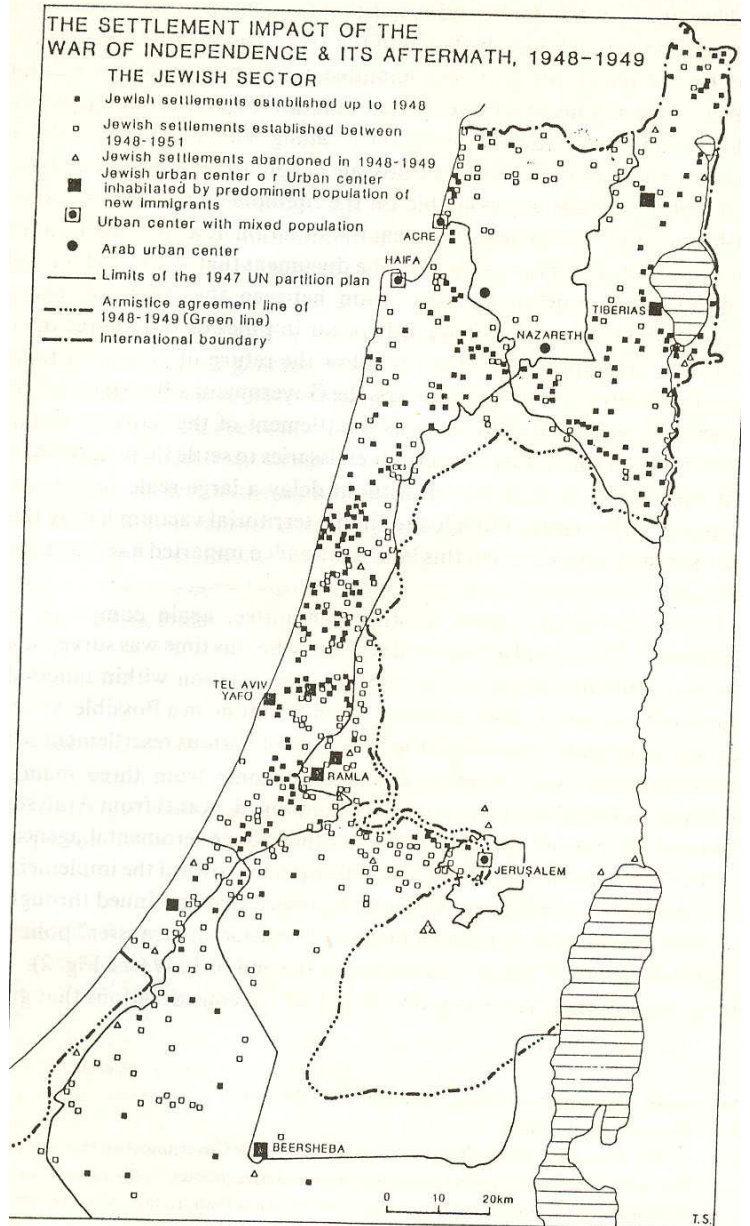


FIG. 2

Israeli Agricultural Expansion

With this unprecedented agricultural expansion, the Israelis began to rely heavily on irrigation and pesticides. All in all pre 1950 Jewish agriculture did not rely much on pesticides or fertilizers and would probably be categorized today as organic and low impact. This changed in the 1950s. Large scale damming and draining projects were also carried out immediately after the war of independence. (Tal, 2002, p. 64) efforts.

Hula Valley

The Hula Valley was chosen by the Zionist settlers as a prime area for conquest. The Hula Valley had always been a special place. This is where two of the tributaries of the Jordan river, the Banias and Hatzbani, converged. (Inbar, 2002, p. 156) Here in the midst of the dry Middle East a deep 25km long valley (Inbar, 2002, p. 156) hosted 6500 ha wetland area of swamps and dense vegetation provided a habitat to migratory and native birds, animals, and aquatic plants. (Golphen, 2003, p.803). Armed with European agricultural ideas the pioneers attempted to transform this valley into agricultural fields that could produce European crops. Lake Hula and its surrounding swampland were drained in the 1950s. (Inbar, 2002, p.155) First, the pioneers widened and deepened the Jordan River channel below the Hula Lake. Then they dug canals through the swamps, and excavated the peat area. These efforts drained 40 sq km and partially drained another 20 sq km. (Inbar, 2002, p. 158) The newly available land was allotted to existing settlements for agricultural use. The project eliminated malaria in the region and created hundreds of hectares of new cropland for alfalfa and cotton.

It would be incorrect to assume that the Zionist rashly drained the Hulah Valley. Before draining the swaps the Zionist conducted intense studies of the area to try to predict the effects of the proposed draining. they even brought in experts from around the world to advise them.

However, their ideology was so intense that they sometimes refused to listen to the solicited recommendation. When a Dutch hydrologist explained that the peat content of the soil would likely undermine their project the Zionist hydrologist vehemently disagreed.

“Our peat is Zionist peat. Our peat will not do damage. As is known, the Dutch have much experience in the reclamation of land. But even they had not yet met land with a political conscience.” (Tal, 2002, p. 97)

The draining of the valley has had some unexpected negative effects. The project destroyed on the oldest documented wetlands in history and caused the loss of habitat for a diverse array of native plants and wildlife. (Inbar, 2002, p.155) Furthermore, the drainage, lowered the water table, elevated the danger of flash flooding, caused loss of land because of compaction caused by agricultural equipment, eroded topsoil once covered by water, dehydrated and desiccated the organic fabric within the soil, created oxidation of organic material, underground peat fires, and led to erosion from runoff and rainwash. (Inbar, 2002, p.159) These factors especially the underground fires caused the failure of much of the hoped for agricultural development. (Inbar, 2002, p.155) A total of 1600 ha of peat land deteriorated. (Tsipris, 1998, p.91)

More than agricultural productivity is at risk. The Hula Valley is located just 15km north of Lake Kinneret, the natural area of the Jordan river that supplies more than 50% of drinking water for Israel. (Gophen, 2003, p.803) When there is a heavy rainfall the altered and drained valley can no longer absorb the water. Instead, large amounts of soil and sediment polluted by the peat fires, created by the draining, washes into Lake Kinneret. This soil is commonly polluted with ammonium, phosphorus, sulfate, and nitrate. (Golphen, 2003, p.804) These compounds decrease the water quality of Lake Kinneret. (Inbar, 2002, p.159)

The Hula Restoration Project was created in 1993 to alleviate some of these problems. Its objectives are to: decrease the decomposition of the peat soils, minimize the flow of pollutants in to Lake Kinneret, and develop opportunities for ecotourism to subsidize the lost income of the farmers who worked the land and to pay for the project. (Inbar, 2002, p.164). 90 km network of canals that regulate the water and curtail the effects of loss of water absorption have been dug, the Jordan River has been returned to its natural riverbed, and an artificial lake has been created near where the old lake used to be. (Tsipris, 1998, p. 91) This new lake, called Lake Agmon, hosts traditional plants reintroduced by the project such as papyrus. (Inbar, 2002, p.164) The restoration project has improved both the farming of the valley and the water quality in Lake Kinneret has improved. (Gopphen, 2003, p.808) The future success will depend on the upkeep and maintenance of the project. (Tsipris, 1998, p.100)

Evaluation of Israeli Impact of the Land and People of Palestine

Today, environmental problems of air pollution asthma, environmental justice, are only increasing in Israel. This is bringing about the creation of an environmental movement. With the formation of an environmental movement in Israel revisionist historians have begun questioning Zionist environmental practices and connecting politics with agriculture. The example of the Hula Valley illustrates some of the effects of these reframing efforts.

The revised story of the Hula Valley brings into question the degradation narrative imposed on the land of Israel by the early Zionists. By extension, it also brings into question their right to the land and the process of redemption. As the fledgling Israeli environmentalist movement begins to grapple with a new version of history, there is hope for environmental cooperation between the Israelis and other Middle Eastern populations. Already, a school called the Arava Institute has been formed to promote environmental cooperation. Here Israelis,

Jordanians, and Palestinians work together to address environmental problems facing their countries. (www.arava.institute.org, 2006))

CONCLUSION

I think that Israel is at a turning point in its environmental history. The Israeli people realize that though Zionism offered breathtaking ecological innovations, it is not the only way to farm in Israel, nor necessarily the best. Moreover, Israelis are beginning to appreciate that many supposed environmental projects are politically motivated. A current Jewish National Fund afforestation project is coming under close scrutiny. Recently the JNF expanded its afforestation campaign to the West Bank planting acres of monocropped trees. Is this really an afforestation campaign or an easy way to take land from the Palestinians and declare Jewish sovereignty over it? These are the kinds of questions that are beginning to be asked by the left wing Israeli public. (Tal, 2002, p. 52)

The field of Political Ecology would do well to pay attention to the story of Israel. Through Israel, political ecologists can examine the impact of religion on land use and note the differences between power structures in the 1st, 2nd and 3rd world. However, the emerging Israeli environmental movement can benefit greatly from Political ecology literature. I believe that in the upcoming years much of the Palestinian Israeli conflict will be fought through agriculture and environmental project like the current JNF afforestation campaign. If Israelis truly care about their homeland, they will educate themselves and not let this occur. Political Ecology literature like Nancy Peluso's ideas on state control through conservation will prove invaluable

Bibliography

- Aaronsohn, Ron (Summer 1995) "The Beginnings of Modern Jewish Agriculture in Palestine; 'Indigenous' versus 'Imported,'" *Journal of Agricultural History* 69(3).
- Bard, Mitchell. Jewish Virtual Library. Retrieved Nov 22, 2006 from: <http://www.jewishvirtuallibrary.org/index.html>
- Ben-Arieh, Yehosua. (1979). *The Rediscovery of the Holy Land in the Nineteenth Century*. Jerusalem: The Magnes press.
- Ben Gurion, David. (1954). *Rebirth and Destiny of Israel*. New York: Polyglot Press.
- Blumber, Arnold. (1985). *Zion Before Zionism 1838-1880*. New York: Syracuse University Press.
- Cronon, William, (1996). The Trouble with Wilderness. *Environmental History*, 1(1), 7-28.
- Dayan, Shmuel. (1961). *Pioneers in Israel*. New York: The World Publishing Company.
- Ettinger, Shmuel & Bartel, Israel. (1982). *The Jerusalem Cathedra: The First Aliyah: Ideological Roots and Practical Accomplishments*. Jerusalem, Yad Izhak Ben-Zvi Institute.
- Fairhead, James & Leach, Melissa. (1995) False Forest History, Complicit Social Analysis. *World Development*, 23(6), 1023-1035.
- Freire, Paulo. (1982). *Pedagogy of the Opressed*. NY, NY: The Continuum Publishing Corporation.
- Goldstein, Yaacov. (1991). *The Settlement Ethos in Jewish and Zionist Thought*. Omaha: University Press.
- Gopphen, Moshe. (2003). The Management of he Lake Agmon Wetlands. *Hydrobiologia*, 506-509, 803-809.
- Hertzberg, Arthur. (1997). *The Zionist Idea: A Historical Analysis and Reader*. Philadelphia, The Jewish Publication Society.
- Inbar, Moshe. (2002). A geomorphic and Environmental Evaluation of the Hula Drainage Project. *Australian Geographical Studies*. 40(2), 155-166,
- Kamen, Charles. (1991). *Little Common Ground*. Pennsylvania: University of Pittsburg Press.
- Kark, Ruth. (1990). *The Land That Became Israel*. Yale University Press.

Kaufman, Shirley & Hasan-Rokem, Galit & Hess, Tamar. (Eds.). (1999) *The Defiant Muse: Hebrew Feminist Poems*. New York: The Feminist Press.

Kniesmeyer, J. & Brecher, D. (1995). *Beyond the Pale: The History of Jews in Russia*, <http://www.friends-partners.org>

Miller, Irving. (1955). *Israel the Eternal Ideal*. New York: Farrar, Straus and Cudahy.

Nadan, Amos. (2006). *The Palestinian Peasant Economy Under the Mandate: A Story of Colonial Bungling*. Boston: Wesleyan University.

Palestine Facts website (2006). Retrieved Dec 14 from <http://palestinefacts.org>.

Peluso, Nancy. (1993). *Coercing Conservation?* CT: Butterworth-Heinemann Ltd.

Ravitzky, Aviezer. (1996). *Messianism, Zionism, and Jewish Religious Radicalism*. Chicago: University of Chicago Press.

Robbins, Paul. (2004). *Political Ecology*. MA: Blackwell Publishing.

Rodinson, Mazime. (1973). *Israel: a Colonial-Settler State?* Monad Press: New York.

Samuel, Maurice. (1944). *Harvest in the Desert*. Philadelphia: The Jewish Publication Society of America.

Shapira, Anita. (1992). *Land and Power: The Zionist Resort to Force*. New York: Oxford University Press.

Smith, Jonathan. (1978). *Map Is Not Territory*. Chicago: University of Chicago Press.

Tal, Alon. (2002). *Pollution in a Promised Land: An Environmental History of Israel*. Berkeley: University of California Press.

Wilson, Rev. C.T. (1906). *Peasant Life in the Holy Land*. London: John Murry.