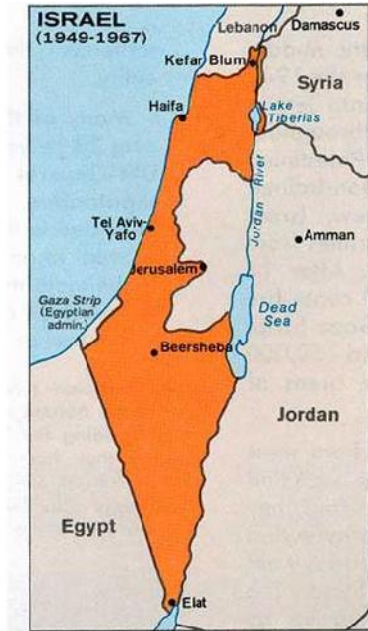


In October 1918, just days after one of the final battles of WW1, the victorious British Army in Palestine collapsed from malaria. So how did this disease influence Israel's borders?

The 1949 map of Israel = a triumph over malaria.



By Anton Alexander (with prompting by Zalman Greenberg).

100 years ago, Palestine was drenched in malaria, but in 1922, it became the place of the first start anywhere in the world of a successful national malaria-eradication campaign. Almost unnoticed has been the part played by malaria and its elimination in the setting of borders in the Middle East in the first half of the 20th century.

Here follows an examination of where Jews purchased land in Palestine before and during the British Mandate period, and of the effect of such purchases on the subsequent borders of Israel in 1949.

BACKGROUND.

Before World War I, for several centuries, Palestine had been a part of the Ottoman Empire. Palestine was so severely saturated in malaria, it was either uninhabitable in many

areas or otherwise very thinly populated. The disease had decimated the population to the point that Mark Twain in 1867 wrote on his visit to Palestine, “A desolation is here that not even imagination can grace with the pomp of life and action... We never saw a human being on the whole route” .

In its 1876 *Handbook for Palestine and Syria*, the travel agent Thomas Cook and Son said of Palestine that “Above all other countries in the world, it is now a land of ruins. In Judea it is hardly an exaggeration to say that...for miles and miles there is no appearance of present life or habitation, except the occasional goatherd on the hillside, or gathering of women at the wells, there is hardly a hill-top of the many within sight which is not covered with the vestiges of some fortress or city of former ages”.

In 1902, in his report entitled “The Geographical Distribution of *Anopheles* and Malarial Fever in Upper Palestine,” J. Cropper wrote of Rosh Hanikra (which marked the border between the provinces of Syria and Palestine), “It was guarded by a small company of Turkish soldiers, and the platoon had to be changed every month because malaria sickened and debilitated everyone after 10 days”.

Between 1882–1914, approximately 75,000 Eastern European Jewish idealists arrived to settle in Palestine (not to be confused with the religious Jews who for centuries came to try to live [and die] in the Holy Land). However, by 1914, about half this number of idealist Jews had died or had left, unable to cope with the severe pestilential conditions.

During World War 1, the Ottoman Empire allied itself with Germany and Austria, and attacked British positions in 1915 on the Suez Canal, Egypt. In 1916, the British Army responded and invaded Palestine from Egypt. The British Army’s Egyptian Expeditionary Force, led by General Edmund Allenby, defeated the Turkish Army, resulting in the British conquest of Palestine in 1918. At the conclusion of the campaign, a senior medical officer with Allenby’s army described Palestine as “one of the most highly malarious countries in the world”. Some 8,500 primary cases of malaria occurred among front-line troops between April 1st and October 1st 1918, but from October 1st to the end of the year, when the troops

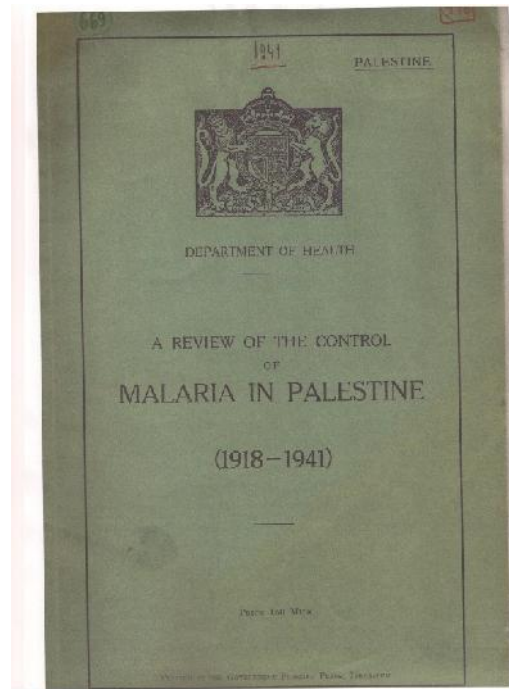
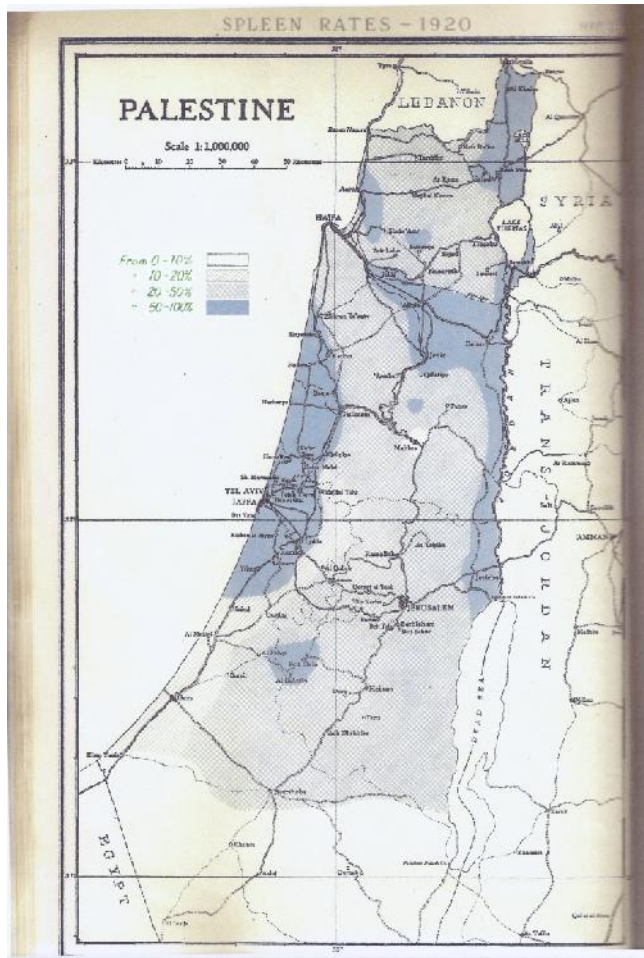
advanced over the old Turkish lines, a much higher incidence of malaria revealed itself and the total number of cases reported during the year as a whole was more than 28,000.

After the defeat of the Ottoman army in 1918, the Palestine Mandate on behalf of the League of Nations was operated from 1920 to 1948 by a British civil administration.

In 1921, the First Annual Report of the British Mandate Department of Health noted 'Malaria stands out as by far the most important disease in Palestine. For centuries it has decimated the population and it is an effective bar to the development and settlement of large tracts of fertile lands There are few regions actually free from it.' And in 1925, when the League of Nations Malaria Commission came to inspect Palestine, the Commission subsequently reported 'Palestine is a small country and, as a whole, thinly populated. ... malaria ... has always been very prevalent, particularly at Jerusalem at Jaffa, Acre and in the Valley of the Jordan'

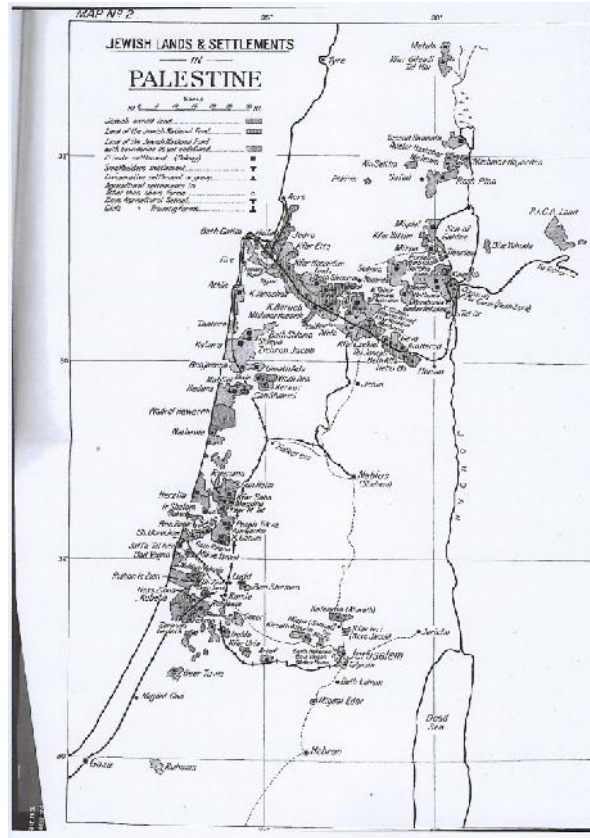
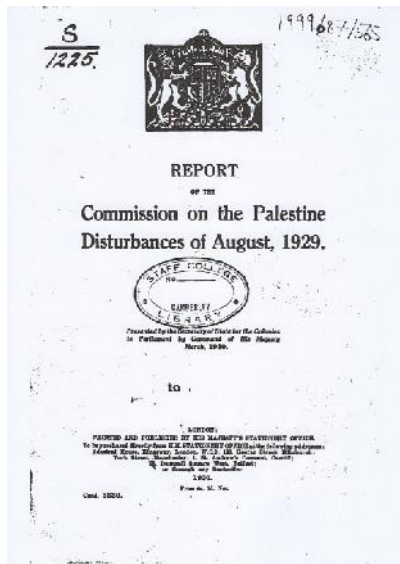
FACTORS WHICH HELPED DETERMINE THE BORDERS OF ISRAEL IN 1949.

The civil administration of the British Mandate in Palestine operated from 1920 until 1948, and the following map of the British Mandate Department of Health shows the severity of malaria in 1920 in Palestine. The map shows the worst areas, the dark blue areas, which were highly malarious. Some of the dark blue areas were even declared uninhabitable by the Health Dept. of the British Mandate.



From 1910 onwards, nearly all of the lands sold to the Jews before and during the British Mandate period were located in sparsely populated or uninhabitable, highly malarial areas of the coastal region and the valleys of Palestine. It is not relevant for this article to consider why Arabs sold or Jews bought land in particular areas. The fact is the land bought by the Jews was mostly located in severely malarious areas.

The British Government Report of the Commission on the Palestine Disturbances of August 1929 included the map below showing Jewish lands and settlements at that time:



An idea of the condition and location of land sold to the Jews may be gathered from the following:

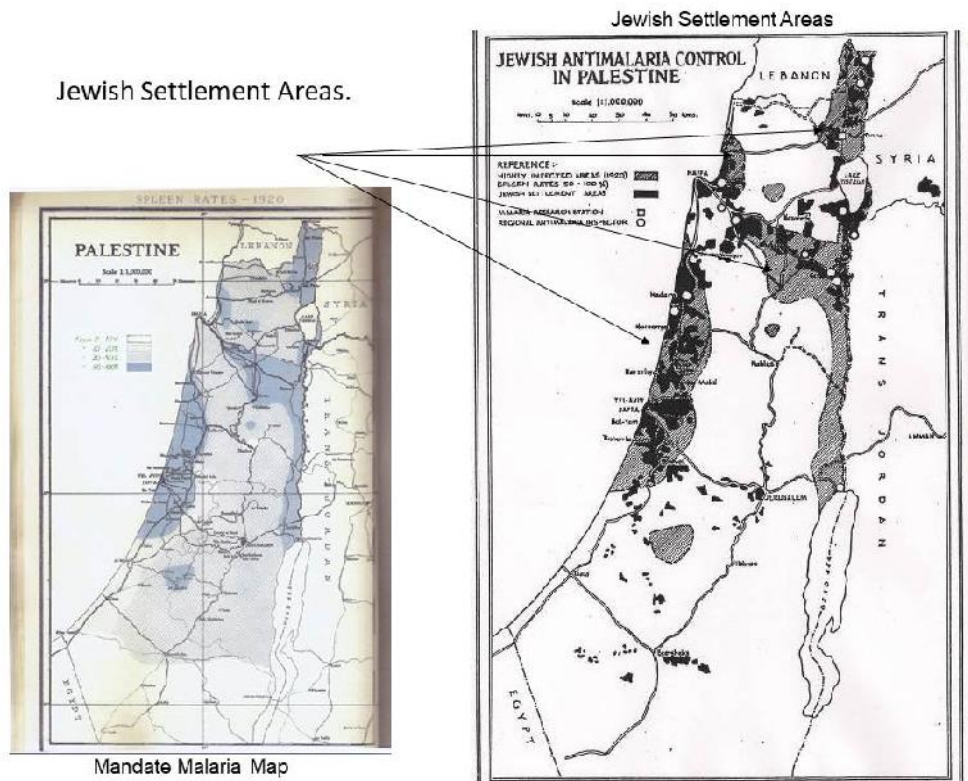
The Palestine Dept of Health, Annual Report 1923 (p.24) noted: ‘In ... the Valley of Jezreel, from Merchavia to Beisan, ... in previous years, there have been severe epidemics of malignant malaria among the newly settled colonists, ... [and whilst there is] ... much well watered and fertile land, [it is] at present lying waste on account of malaria,...’

The League of Nations Malaria Commission. Report on the Tour of Investigation in Palestine in 1925.(p.23) commented: ‘... about 51 square miles of the Esdraelon Valley [which included the Jezreel Valley] were purchased by [Jewish organisations] ... and laid out in 20 villages About 700 acres were afforested and all the swamps and marshes within the colonised area were drained. “The whole aspect of the valley has been changed. ... and what [in 1920] was little better than a wilderness is being transformed into a smiling countryside.”’

The Palestine Royal Commission 1937.(p.314) also commented: ‘The expenditure [on anti-malaria work] ... by the Jews is due to the rapid pace of their colonization and to the fact that they purchased a large amount of land where malaria had been rife for centuries’.

The British Mandate Palestine Dept. of Health in its 1941 Review commented (p.5) about rural Jewish immigrants: ‘The wave after wave of immigration which has occurred has resulted in the invasion of many sparsely populated and “wild” areas by a people new to malaria.’

The map below on the right shows the locations of Jewish settlements with the highly malarious areas superimposed on it, thus demonstrating to what extent the lands purchased by the Jews were in such malarious (sometimes even uninhabitable) areas. But these were usually the only lands available to them.



At the conclusion of WW1, sustainable malaria control in Palestine had been viewed by the British governing authorities as impossible. Significantly, even a 1918 British Army Medical Authority report noted that “It is interesting to speculate on what can be the future of a country such as [Palestine] from the health point of view. One cannot conceive the problem [in Palestine] which faced the Army last spring [in 1918 during WW1] being undertaken by a Civil Authority. The expense alone would be prohibitive... The great bulk of the work was washed out by the first rains of October (1918)”.

After WW1, Jews seeking to settle in Palestine realised they had to try to undertake steps to eliminate the disease or they would perish. The matter could not be allowed to drift. In 1921/2, an idealistic Jew, Dr I Kligler, a public health scientist, who had arrived to settle in Palestine in 1920, began what was to become the first start of a successful national malaria-eradication campaign anywhere in the world, the eventual outcome of which was Israel being declared free of the disease by 1967.

But returning to the early 1920s, there was no proven, affordable method that rendered severely malarial land safe and usable. Anyone could have been understood to have taken the

view at that time that such land was of little use because the experience in the world of malaria control involved thousands of men (as demonstrated e.g. by Gorgas at the Panama Canal and by Allenby in Palestine) and that anyway, such control in those places had been at vast cost and expense. Other than Dr Kligler's method of malaria elimination (which he had only just begun), sustainable and affordable malaria-elimination was unknown in those days.

Kligler's method of malaria elimination was principally focused on destruction of the breeding sites of the mosquito which carried the disease. His method included engaging with the whole rural Palestine population (albeit a very small one) to successfully secure the co-operation of both Arab and Jewish local communities who would maintain the anti-malaria works already carried out, and thereby ensure the mosquito did not return to that district.

By 1941, the success of Kligler's method in malaria-elimination in Palestine was to prove so striking that the British Mandate's Palestine Department of Health reported:-.

'An interesting recent feature has been noticed. In a number of areas where intense endemic malaria had resulted in no population for generations, recent [antimalarial] schemes have created large tracts of cultivatable land.' and ...

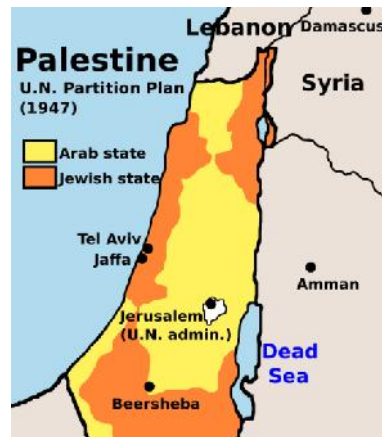
'That very large areas of what is recognised by all as some of the most fertile land in the country have been reclaimed, after centuries of waste, by the antimalaria measures undertaken, is now obvious. Many large tracts which until recently meant nothing but death to those venturing into them, have now been reduced into rich and fertile land free from all danger to health.'

PARTITION

From 1929 onwards, there were periods of violence in Palestine between Jews and Arabs , and in February 1947, Britain announced its intention to terminate the Mandate for Palestine, referring the matter of the future of Palestine to the United Nations. The United Nations Partition Plan for Palestine in 1947 was a proposal by the United Nations, which recommended a partition of Mandatory Palestine at the end of the British Mandate. On 29 November 1947, the UN General Assembly approved and adopted the Plan as Resolution 181. (The Jews accepted the Resolution. The Arabs rejected it.)

The Partition Plan reflected those areas where principally the Jews lived and separately where Arabs lived.

It will be noted that within the proposed Jewish state, the Partition Plan had included most of the 'dark blue' malarious areas shown on the 1920 British Mandate malaria map, as those had been the areas usually containing almost the only land available for the Jews to purchase.



Immediately following adoption of the UN Resolution by the General Assembly in November 1947, outbreaks of violence took place between Palestinian Jews and Arabs known as the 1947-48 Civil War.

On 14th May 1948, the British mandate expired and the British forces withdrew from the area. The Jews proclaimed the establishment of the State of Israel, and the 1948 Arab-Israeli War began with the invasion of, or intervention in, Palestine by the neighbouring Arab States on 15th May 1948.

The Jews defended and then defeated the invading Arab armies. And yet the subsequent 1949 Armistice Lines reflected a similar shape and pattern to that of the UN Partition Plan for the Jewish state, which in turn had reflected the 'dark blue' malaria severity of the 1920 Map in what, 100 years ago, had been 'one of the most highly malarious countries in the world.'



1949 Armistice Lines.

CONCLUSION. Most of the land bought by the Jews was in severely malarious areas, most of the Jewish settlements were on severely malarious land, and the locations of most of these settlements had an effect on the future shape of the map of Israel. The 1949-1967 map of Israel represented a defeat of malaria.