



greenXchange

greenXchange Seminar 2013 Tour

October 2013

Tour

Welcome to Israel – undoubtedly one of the most fascinating Mediterranean countries, with its varied natural and human landscapes. Our tour will take us to different parts of the country, from modern Tel Aviv to the Holy City of Jerusalem, along Israel's fascinating Mediterranean coastline and up to the green Galilee. Along the way we will visit a variety of KKL-JNF change-making projects that improve Israel's water economy and environment.



KKL-JNF, Israel's major environmental organization, works throughout the country with both Jewish and non-Jewish populations to create projects that make a difference: recycled water reservoirs, environmental education programs, desert afforestation to prevent erosion and desertification and forestry work to prevent wildfires and restore areas that have been damaged by fire.

Enjoy your trip!



Keren Kayemeth LeIsrael • Jewish National Fund



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1 Tel Aviv-Jaffa –the "City That Never Sleeps"

Tel Aviv, Israel's commercial and cultural heart, was founded in 1909, on the shores of the Mediterranean Sea – the first Hebrew-speaking city in modern times!

Facts & Figures:

- The Tel Aviv Metropolitan Area has a population of 3.15 million – 1/3 of Israel's population.
- Tel Aviv's current population is 390,000 – it is expected to reach 450,000 by 2025.
- Tel Aviv's area is 51.8 square kilometers.
- Tel Aviv is twinned with 27 cities in Europe, North and South America and China.
- Tel Aviv ranks first in the country in per-capita spending on education.
- Tel Aviv is the most expensive city in the Middle East and 14th most expensive in the world.



1937 its population reached 150,000, and in 1948 it was 200,000. In 1950 Tel Aviv and Jaffa were merged into one municipality. The port of Jaffa is older than Jerusalem, and the oldest operating port in the world.



Tel Aviv, which means "hill of spring", is the Hebrew title of Theodore Herzl's book *Altneuland*. Its beginning was in Neve Tzedek, the first neighborhood outside Jaffa that was built between 1887 and 1896. In 1908 the Ahuzat Bayit Society bought land on dunes north of Jaffa, followed by the Nahalat Binyamin housing society in 1909. By 1910 the nucleus of Tel Aviv was developed and on May 21 the name Tel Aviv was adopted. It was planned as a European-style garden suburb of Jaffa, with wide streets and boulevards. By

Tel Aviv contains the largest collection of Bauhaus architecture in the world and has been named the White City – a collection of 4000 International style buildings built in Tel Aviv from the early 1930s until the 1950s, based on the urban plan by Sir Patrick Geddes, reflecting modern organic planning principles. The buildings were planned by German Jewish architects who immigrated to pre-state Israel after the rise of the Nazis. In 2003 UNESCO proclaimed Tel Aviv's White City a World Heritage Site, as "a synthesis of outstanding significance of the various trends of the Modern Movement in architecture and town planning in the early part of the 20th century".

KKL-JNF and Tel Aviv

KKL-JNF has been involved with the city of Tel Aviv since its earliest stages, providing funding for the Ahuzat Bayit and Nahalat Binyamin housing societies that built the neighborhoods that became the basis of modern Tel-Aviv.

KKL-JNF Projects in Greater Tel Aviv Area:

- Keren Kayemeth House – KKL-JNF's key Tel Aviv project. An educational center and museum that tells the amazing story of land redemption in Israel and the story of the modern State of Israel. This is the house where the decision to declare Israel an independent state was drafted and approved, and where later Israel's provisional government sat. KKL-JNF provides funding for maintenance, publications, educational activity and other ongoing events.
- Herzliya Gymnasium – landscaping and gardening.
- Menachem Begin Park – a large, intensively developed urban park in southern Tel Aviv.



- Palmach House Museum – artistic development of the southern path and landscaping.
- Yarkon River Rehabilitation – 14 kilometers of riverbanks were rehabilitated in stages. Includes river rehabilitation (riverside plant maintenance, cleaning and planting), constructed wetlands, riverside development and a bicycle trail.
- Bird's Head Park – a large urban park focusing on a 125-acre (50 hectares) eucalyptus grove on the Yarkon River banks. Is being developed as an ornithological center.
- Rothschild Boulevard – development and landscaping.
- Tsahala – Moda'i Urban Park – a 12.5-acre (5 hectares) intensively developed park.
- MAOF educational project. The Shevah



2 The Hefer Valley

Mofet School – 80% of whose students are new olim – was chosen for the pilot project, which succeeded above and beyond all expectations.

- "A Tree for every Resident" – is part of the United Nations project "Planting the Planet." As part of this effort KKL-JNF donated trees to the Tel Aviv-Jaffa municipality to plant trees along Rothschild Boulevard.
- The Tel Aviv-Jerusalem Bicycle Trail – over 120 kilometers long, the trail begins in northern Tel Aviv near Gane Yehoshua Park and ends at Jerusalem.
- Support for research on water and the environment at Tel Aviv University.
- Yitzhak Rabin Center – where soldiers and students learn about tolerance and pluralism. KKL-JNF is participating in landscaping the grounds.
- The Bat Yam Biofilter Pilot Project – KKL-JNF is helping to plan and introduce two types of innovative rainwater harvesting technologies in a residential neighborhood in the city of Bat Yam. The biofilters will collect, purify and reclaim urban runoff, which will then be used for urban irrigation and to recharge Israel's coastal aquifer. The pilot project includes monitoring activity. The system's sustainable technology requires no energy to operate.
- Yaffo – Shared Values Park – The park was developed in the spirit of co-existence between the Jewish and Arab populations in Yaffo. KKL-JNF is improving accessibility in the park so it can be enjoyed by people with disabilities.
- The Peres Center for Peace is an independent, non-profit, non-partisan, non-governmental organization founded in 1996 by Nobel Peace Laureate and current President of Israel Shimon Peres, with the aim of furthering his vision in which people of the Middle East region work together to build peace through socio-economic cooperation and development, and people-to-people interaction. KKL-JNF is conducting part of the landscaping of the center.

The Hefer Valley today includes forty-two thriving communities, a number of educational centers and a large industrial center, all organized in the Hefer Valley Regional Council, one of the oldest (incorporated in 1940) and largest (125 square kilometers) in the country. The agricultural economy of the region is varied and includes citrus and avocado groves, orchards, flowers, vegetables, poultry and dairies, as well as many of Israel's major agricultural processing plants. Close to 30,000 people of various ethnic groups, origins and religions, new immigrants and veteran residents, now make their homes and earn their living from the fertile Hefer Valley.



The Bahan Recycled Water Reservoir and the Yad Hanna Sewage Treatment Plant

Water in Israel has always been of major importance – for farming, for the environment and for people. Our need for water however, is only matched by our lack of it – Israel is one of the poorest countries in the world in this precious resource and has seriously over-exploited its groundwater, leading to salinization and deteriorating water quality. Although existing renewable water sources are fully exploited there is still not enough to go around. One of the solutions for this problem is wastewater recycling, a field in which Israel, with the help of KKL-JNF is a global expert.

The Hefer Valley water management program combines and integrates two important fields – wastewater recycling and river rehabilita-

tion – in what is undoubtedly one of the most outstanding ecological projects underway in Israel today: the Alexander River Demonstration Project. In 1994 the Israel River Rehabilitation Administration (headed by KKL-JNF), the Hefer Valley Regional Council and the Sharon Drainage Authority established the Alexander River Restoration Administration. In 1995 an interdisciplinary planning team prepared a comprehensive master plan for the entire river basin, which defined river restoration policy, and determined projects and activities to implement this policy. KKL-JNF plays a major role in this process and is responsible, among other things, for site preparation, operative management, afforestation and education. The Alexander River Demonstration Project received the prestigious Australian "Thiess Services International Riverprize".

The Alexander River is one of the largest, most beautiful rivers in central Israel. It flows from the city of Nablus in the Samarian Hills to the Mediterranean Sea. The lower part of the river, where it flows into the Mediterranean, has permanent water flow and a rich and varied landscape and ecosystem. It also has one of the last viable populations of the African softshell turtle. KKL-JNF and the regional council have developed a number of reservoirs to store treated effluents from local sewage treatment plants and from the Nablus River and prevent them from flowing into the river. The Yad Hanna and Bahan reservoirs are two of them. Water stored in these reservoirs is used for irrigating crops grown by farming communities in the area and some of the water is diverted into the Alexander River. The neighboring Palestinian cities of Tulkarm and Nablus are also part of the project, whose major goal is to eventually create a joint Israeli-Palestinian sewage treatment complex. The German Government is involved in the joint environmental project. Ecology, which knows no political borders, has become a unique bridge between people from both sides of the security fence.

3 Ramat Menashe Biosphere Park

Ramat Menashe, the Menashe Plateau, is situated south of Mt. Carmel, and is one of the most beautiful regions in Israel. The area is a unique combination of natural Tabor oak woodlands and planted conifer forests, open spaces, fields and orchards, springs and streams. The gentle slopes and rural character of the region create a pastoral, tranquil atmosphere. The region has a wealth of historic and archaeological remains from prehistoric times through the Ottoman Period, as well as extensive heritage related to the settlement and establishment of the modern State of Israel.



On July 1, 2011, the Ramat Menashe Biosphere Reserve joined UNESCO's World Network of Biosphere Reserves and became the second officially recognized biosphere reserve in Israel. KKL-JNF has been involved in developing the Ramat Menashe Biosphere Reserve from its very beginning. The biosphere reserve includes KKL-JNF's Ramat Menashe Park (8400 hectares), which had been managed according to sustainable principles even before the reserve was officially recognized, as well as several KKL-JNF forests (Mishmar HaEmek, En HaShofet, HaZorea, Dalia, Gal'ed, Megiddo and Oz). The park is now part of the buffer areas of the newly declared biosphere reserve.

KKL-JNF forests in the region are also part of the buffer area, fulfilling their role by providing a venue for recreation that serves the public visiting the core areas in the reserve and protecting the sensitive core area from the more intensive human activity characteristic of the settled transition areas. Moreover, KKL-JNF's policy of developing attractions suited to the requirements of people with special needs is in line with the principles of universal design.

4 Biriya Forest

Biriya Forest, on the slopes of the mountains north of Tsfat in the Eastern Galilee is one of the largest forests in Israel, and the largest planted forest in the Galilee, extending over 5000 acres (2000 ha). The forest is a green lung and a major recreation in nature center for the nearby city of Tsfat, as well as for residents from the towns of Hatsor and Rosh Pina and the rural settlements in the Upper Galilee. Biriya Fortress in the center of the forest attracts many visitors. Forest roads and trails lead to a variety of archeological and historical sites, fantastic panoramic views, springs, vegetation and wildlife, as well as several tombs of ancient sages.

KKL-JNF's "Forester for a Day" Program

A meaningful highlight of any visit, vacation, or family celebration in Israel: KKL-JNF's "Forester for a Day" program, is a new ecological initiative, offering visitors a unique opportunity to assist KKL-JNF in maintaining our forests, preventing forest fires and ensuring a greener tomorrow for Israel. Groups participating in the program work side-by-side with KKL-JNF foresters to clear underbrush, prune trees, prepare fire breaks and forest paths in the Ben Shemen, Carmel, Biriya or Lahav forests. The program runs 2-3 hours in its entirety and work is done under the supervision of foresters and KKL-JNF guides. Upon completion, each participant receives a KKL-JNF hat, pin and a certificate of appreciation.



5 Tsfat

Tsfat, the capital of the Upper Galilee, is Israel's highest city, located at an elevation of 900 meters. The city overlooks the amazing scenery of the area between Mt. Hermon, the Golan Heights and the Galilee. Tsfat, whose current population is 27,000, has been



considered one of Judaism's Four Holy Cities since the sixteenth century, along with Jerusalem, Hebron and Tiberias. The city boasts an academic college, a regional hospital, hotels and industrial areas and attracts many visitors who enjoy walking along its old streets and visiting local artists' workshops and ancient synagogues.

KKL-JNF, together with the Tsfat Municipality, developed the Blue Valley Park in the northern section of Tsfat creating a natural gem with small springs surrounded by orchards, olive groves and native woodlands in which deer, ibex and addax roam about freely. Ancient terraces were restored and seating corners added for the benefit of visitors.



6

The Hula Valley

The Hula Valley is one of the most unique regions in northern Israel. Lush, green fields are interspersed throughout the valley surrounded by imposing mountains on the east (the Golan Heights and Mt. Hermon) and the west (the Galilee Mountains). Ancient volcanic activity formed the striking black basalt hills south of the valley, the very hills that slowed down the flow of melted snow and rain from Mt. Hermon south into Lake Kinneret, creating historic Lake Hula and its surrounding wetlands.



In the 1950s the Israeli government decided to drain the marshes in the valley to increase the amount of farming land and eradicate malaria. In what was considered one of the greatest engineering achievements of its time KKL-JNF drained the swamps. As the years went by, however, it became obvious that this action had far-reaching ecological impacts, many of them complex and problematic, such as pollution of Lake Kinneret, Israel's major source of drinking water. In the 1980s KKL-JNF led the founding members of the Hula Restoration Project, including the leading environmental agents in Israel, in formulating a rehabilitation program for the valley.

The Hula Valley Restoration Project is the flagship KKL-JNF project in northern Israel. The new lake, created by the re-flooding operation, occupies part of the area once covered by the original Hula Lake. The site attracts hundreds of thousands of visitors who come to enjoy its amazing scenery and unique bird life every year. The new management approach for the valley created a delicate balance between agriculture and the restoration of the rich ecosystem that once flourished in the region. The program also involves developing eco-tourism and other economic projects appropriate for the twenty-first century.

7

The Northern R&D Station

Regional research and development stations focus on agricultural research and development in peripheral regions of the country. The Northern R&D Station operates over an extensive region in the Golan Heights and Galilee, characterized by a variety of environments and communities. The station conducts studies at eight experimental farms and applies them in over 75 model farms. About 22,000 hectares are used for agriculture in this region with crops aimed mainly at the domestic market. Studies focus on cultivation of deciduous fruit trees, wine vineyards, citrus fruits, subtropical fruit trees, olives, dates and bananas, environmentally-friendly pest control methods, vegetable, mushroom and flower farming and cattle grazing, which today plays an essential role in the preservation of open spaces and rural landscapes.

The Shamir Drills – Using Geo-thermal Water for Agriculture

The Shamir Drills are a series of three deep wells that access a recently-discovered large-scale aquifer at Kibbutz Shamir in northern Israel. Preliminary research has shown that the water has potential for drinking and irrigation. KKL-JNF's Northern R&D station is conducting research relating to the feasibility of using the water for farming: long-term effects on soil, effects on water lines and irrigation, optimal ratio to freshwater, monitoring irrigated fields and uses for the heat generated from the water.



8

Lake Kinneret – the Sea of Galilee

Lake Kinneret, Israel's only natural freshwater lake is located in the northern part of the Dead Sea rift. Its drainage basin covers an area of 2,700 square kilometers and the lake surface area is 168 square kilometers, with an average depth of 25 m. Some of its water (50,000,000 cubic meters) is allocated to the Kingdom of Jordan as part of the 1994 Israel-Jordanian Peace Accords.



Lake Kinneret is Israel's major water source and provides more than 25% of the country's total water supply via the National Water Carrier, and 50% of the country's domestic water demand. The lake is also a major tourist attraction (for both locals and foreigners) and supports commercial fishery. Safeguarding the stability of the lake ecosystem to assure a long-term continuous supply of high quality water is a major national interest.

KKL-JNF developed a number of projects focusing on Lake Kinneret and its surroundings:

- A bicycle trail overlooking the lake. The 142-km trail circles the lake via the hills surrounding it and is one of the longest, most beautiful cycling routes in the country, combining magnificent landscapes, sites of interest and recreational water spots. The trail was developed by KKL-JNF together with local communities and the Ministry of Tourism. When the route is completed cyclists of all levels will be able to circle Lake Kinneret and reach its beaches with ease.
- KKL-JNF planted Swiss forest on the western side of Lake Kinneret. It extends over 300 hectares and was planted with the help of the Swiss Jewish community. Various attractions were developed in the forest including a scenic road, scenic lookouts, trails, picnic and recreation areas.
- KKL-JNF has developed a number of projects focusing on Christian sites at or near the lake including the Gospel Trail, Capernaum and Berniki Beach.

9

Jerusalem

KKL-JNF continues to develop new projects in Jerusalem and its surroundings. As the city grows, urban green open spaces become more important than ever for the welfare of its inhabitants. The many and varied projects we have developed over the years include:

The Jerusalem Park

The Jerusalem Park is a new metropolitan park that extends over some 4000 acres, surrounding Israel's capital to the north, west, and south. The park preserves ancient landscapes while offering diverse leisure and recreation opportunities for Jerusalem residents and visitors to the city. It includes footpaths and bicycle trails, picnic sites, playgrounds as well as quiet corners.



KKL-JNF is a key partner in this project and works together with the Jerusalem Municipality to nurture existing forest areas, plant orchards, renovate traditional agricultural terraces, and rehabilitate neglected stream beds. Projects in the park include:

- A paved bicycle trail in the Arazim Valley Park; a number of scenic lookouts have been developed along it and a play complex is now being built.
- A paved accessible bicycle trail in the Motsa Valley.
- Ha'Arazim Valley / Me Naftoah – Memorial for the Victims of September 11th.

Other projects in Jerusalem:

- KKL-JNF Presidential Garden – KKL-JNF participated in landscaping the gardens surrounding the Presidential Residence.
- Gilo Park – the largest park on the southern side of Jerusalem provides a variety of recreational activities for people of all ages and abilities.
- Jerusalem Forest – undoubtedly the first and foremost of Jerusalem's forest-parks, encircling the western section of the city. The inhabitants of adjacent communities are active participants in planning and conserving Jerusalem's major green lung and protecting it from urban encroachment.
- Aminadav Forest – southwest of the city, this forest is noted for its many remains of traditional agriculture (terrace farming, spring development, etc.): a variety of recreation and leisure activities for everyone.
- Yad Kennedy – monument (and visitors center) in memory of the late American President John F. Kennedy.
- Ramot Forest – playground and leisure facilities for the residents of the Ramot neighborhood.
- Neve Ya'akov Forest – plantings and forest conservation and community activities in the forest.
- Sataf – the original spring and its surrounding terraces have been restored, making this popular site just outside of Jerusalem a favorite with locals and visitors alike. Sataf hosts joint Jewish-Arab student activity focusing on ecology and the environment, which contributes to mutual understanding and coexistence.
- Forest Development in the Jerusalem Vicinity – Rabin Park, Begin Park, Sataf.
- Ramat Rahel Park – an accessible archaeological public park.
- Giv'at HaMatos – housing infrastructure for new immigrants.
- Jerusalem Botanical Garden at Giv'at Ram – we were active participants in establishing this popular site and are involved in its ongoing operation.

- "Builders of Jerusalem" Park – landscaping around the walls of the Old City of Jerusalem.
- Pisgat Ze'ev – olive trees and participation in signage in the Bene Atarot Park.
- Peace Forest – Gan Yaldei Yisrael (Jerusalem Children's Park).
- Ammunition Hill – KKL-JNF is involved in building the Memorial Center for soldiers who fell in the battle for the hill in 1967 and in landscaping the site.
- Environmental Education Activities with Jerusalem Schools & Orienteering Groups.
- Support for Research at the Hebrew University.



- Upgrading the Botanical Gardens on Mt. Scopus, with its unique representation of Israel's native vegetation. With the help of KKL-JNF, the garden is open to researchers and students from around the world.
- Hano'ar Hatsioni Youth Village – Landscaping the entrance to the school for children with Autism Spectrum disorders
- Landscaping around ALUT homes for people with autism in the Gilo and Manahat neighborhoods.
- Mt. Scopus Hadassah Medical Center – therapeutic garden.



Did you know that KKL-JNF together with friends and donors from Israel & abroad...

- Planted more than 240 million trees
- Manages and maintains 40,000 hectares (100,000 acres) of natural woodland
- Contributes to Israel's water economy by building reservoirs and dams to impound runoff, floodwaters and recycled water, providing 75% of the water used for agriculture
- Rehabilitates and restores polluted waterways
- Built 1,000 recreation areas throughout the country, including leisure areas and regional parks that host tens of thousands of visitors
- Develops thousands of kilometers of cycling trails, crisscrossing the length and breadth of the country through forests and open areas, for the public and for free
- Creates a bond between people and forests by organizing recreational and cultural activities in nature for all
- Conserves the environment, rolls back the desert and creates shady green sites in army bases and southern communities
- Carries out cutting-edge research whose findings are applied to water conservation, sustainable forestry, the prevention of soil erosion, modern agriculture and related environmental issues
- Partners with international organizations; sharing knowledge and implementing projects in cooperation with countries around the world to help find solutions to environmental challenges.
- Reclaimed land for about 1,000 communities throughout Israel
- Reclaimed some 100,000 hectares (250,000 acres) of land for farming
- Purchased some 260,000 hectares (650,000 acres) of land for communities
- Forged 8,000 km of roads and forest routes
- Educates hundreds of thousands of young people in Israel and abroad, intensifying their bond with Israel and helping the social integration of new *olim* into Israeli society

*And our vision for the
next decade continues...*



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KKL Resources Development & Public Affairs Division
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