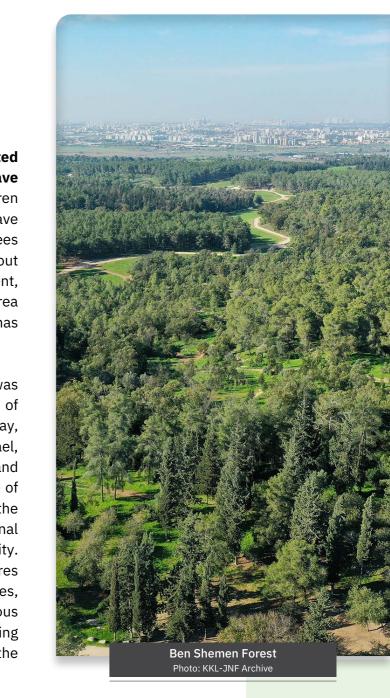


Forests: A Key to Solving the Climate Crisis Join KKL-JNF in Ensuring the Future of Israel's Forests

While the world's forests have depleted over the years, those of Israel have only increased. Thanks to KKL-JNF, the barren landscapes of the early 20<sup>th</sup> century have been transformed by verdant swathes of trees planted on more than 250,000 acres throughout the country. This is an amazing achievement, considering that over half of Israel's land area is semi-arid and arid, and indeed, KKL-JNF has afforested 40,000 acres of desert land.

**Established over 120 years ago**, KKL-JNF was one of the world's first pioneers in the field of environment and sustainable development. Today, with a staff of over 1,000 professionals in Israel, KKL-JNF is active in more than 55 countries and works in close collaboration with a wide range of government agencies and NGOs. Mandated by the government, KKL-JNF acts as Israel's National Forest Service and Land Development Authority. In this capacity, it manages over 300,000 acres of planted forests, woodlands, and open spaces, while initiating and implementing numerous national land development activities, enhancing the environment and quality of life for all the country's residents.

KKL-JNF, synonymous with the country's forests, spearheads Israel's efforts to address the climate crisis. KKL-JNF's forests, which sequester 3 million tons of  $CO_2$  annually, improve air quality, serve as green lungs for the small and densely populated country, help to reduce surface air temperatures, and act as noise barriers, among other vital environmental benefits they provide. The Yatir Forest alone exemplifies the ecological impact of one forest. Extensive research has shown that the Yatir Forest, the largest planted forest in the country and situated on the edge of the Negev desert, sequesters atmospheric carbon at a rate similar to that of European temperate forests.



Mitigating greenhouse gases and preventing desertification are only two of the many environmental contributions of KKL-JNF's forests, which have been sustainably developed. Due to KKL-JNF's extensive investment in research, innovative approaches to forest management contributed to the development of a new Forest Management Policy (FMP) for Israel in 2014. As well, KKL-JNF's forests and forestry projects fulfill the relevant UN Sustainable Development Goals (SDGs). KKL-JNF's forestry renewal management promotes biodiversity with the planting of mutli-species and multi-age stands, providing habitats for wildlife and ecosystem services for the



country's residents and visitors. These include forest picnic and leisure areas, scenic lookouts, historical and heritage sites, and miles of walking and cycling trails. In the southern region, the Arava and the Negev, plantings with drought-resistant species prevent soil erosion and combat desertification. They are irrigated by methods such as limans, developed by KKL-JNF to exploit the meager amount of available water to the best advantage. Moreover, KKL-JNF shares its knowledge and implementation of these methods with other semi-arid and arid land regions of the world.

**Wildfires are a major threat to Israel's forests**, exacerbated by a dry climate, prolonged summers, climate change, and pyro-terrorism. KKL-JNF has created firebreaks and fire lookout towers and operates a firefighting team and a fire



truck fleet designed for fighting forest fires. In the wake of wildfires, the KKL-JNF forestry division implements rehabilitation programs tailored to each forest.

Further efforts to address the climate crisis include an innovation center, which KKL-JNF is presently developing, dedicated to finding solutions through new technologies. With the aim of developing alternatives to the use of fossil fuels, KKL-JNF promotes renewable energy initiatives, such as the extensive use of solar power. Due to the country's limited space, the area provided by KKL-JNF's 230 recycled wastewater and runoff reservoirs, 40 percent of whose water is used for the country's agriculture, can also be used to float solar panels. In addition, KKL-JNF's scientists are researching the viability of agrivoltaic systems.

eyond having transformed Israel's landscape through afforestation, KKL-JNF's varied and many projects are key in shaping the country and include the development of over 1,000 communities, preparing land for agriculture, bolstering the country's water economy, rehabilitating polluted streams and stream banks, landscaping public service and medical institutions, creating community parks and playgrounds, promoting informal eco-education initiatives, supporting cutting-edge agricultural research, and more. The principles of sustainability inform all KKL-JNF's activities, some crossing borders, even to countries with which Israel has no formal diplomatic relations, wherein KKL-JNF shares its knowledge and know-how in areas such as dryland management and food security.





Photo: KKL-JNF Archive

## **Planting with KKL-JNF in Israel**

#### Forest plantings and management are categorized as follows:

Afforestation: New plantings are determined by climatic, soil and geomorphic conditions in addition to considerations of the forest's intended ecosystem services. Tree seedlings are produced in the KKL-JNF nurseries and KKL-JNF conducts research to establish the suitability of a species to its designated planting area. Tree species include conifer, fruit trees, and broadleaf, represented by oak, Atlantic Pistacia, terebinth, carob, tamarisk, Syrian pear, storax, hawthorn, among others,

and differentiated by Mediterranean and desert regions.

**Rehabilitation:** Restoring forests damaged by wildfires or extreme weather events, including droughts, torrential rains, and snowstorms.

**Renewal:** Saving forests, many of which are veteran, from degradation and decimation requires conservation interventions that include pruning, thinning, sanitizing, grazing management, and the treatment of pest infestation and diseases.

A forestry project is decided on by the size of the area requiring afforestation, rehabilitation, or renewal, as opposed to the number of trees. A project is described as a Tree Garden, Small Grove, Large Grove, and Forest, according to its size.



\* Map of the three planting regions (northern, central and southern)

#### **Donor Recognition**

Donors will be acknowledged with an inscription in the KKL-JNF Honor Book of Groves and an honorary plaque affixed to a commemorative wall in one of KKL-JNF's forest dedication sites throughout the country in addition to a specially designed certificate of appreciation.

#### **Dedication Ceremony**

A ceremony befitting the occasion will be held at the completed site in honor of the grove and forest sponsors and organized with the donor's participation. The dedication ceremony includes an honorary plaque unveiling, certificate presentation, a symbolic tree planting, and speeches by sponsors and honorees. Guests are served light refreshments and musical interludes may be incorporated into the proceedings at the conclusion of the ceremony by prior coordination. In exceptional cases, KKL-JNF will install an individual honorary marker in a forest.

### **Trees of Life**

Since time immemorial, trees have been imbued with powerful symbolism by peoples and religions worldwide, rooted and entwined in human culture as in the Earth's ecosystems. Trees enjoy a distinguished place in the Bible. The many species mentioned are employed as metaphor and symbol for wisdom, the righteous, and for life itself, as in Proverbs 30:11, "The fruit of the righteous is a tree of life..."

> May you be blessed with the seeds of good deeds and the sweet blossoming of the years.

May your partnership with KKL-JNF prove fruitful and ensure a green and sustainable Israel for all its people.







# How can I take part in ensuring the future of Israel's forests and address the climate crisis?

Deepen your roots in Israel: Plant a tree via zoom: https://plantatree.kkl.org.il/

Support afforestation, maintaining biodiversity and forests, restoring burnt forests and combatting desertification: https://bit.ly/3k73phh

Support KKL-JNF collaborative research in land, forest and water management, ecosystems, food security and desertification: https://bit.ly/3yPjHiY

Watch: KKL-JNF is Acting Against the Climate Crisis https://bit.ly/3ASf4qa

Watch: KKL-JNF – 120 Years of Vision and Action https://bit.ly/36ssg6X











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