

Creating and Preserving Israel the Beautiful

The Land of Milk and Honey

Transformation of the Land from Barely Habitable Deserts and Disease-Infested Swamps

Source: *Facts about Israel: The Land*

“A land flowing with milk and honey” - (Exodus 3:8)

The Land

Israel is a small, narrow, semi-arid country on the southeastern coastline of the Mediterranean Sea. It entered history some 35 centuries ago when the Jewish people forsook its nomadic way of life, settled in the Land and became a nation. Over the years, the Land was known by many names — Eretz Yisrael (Land of Israel); Zion, one of Jerusalem’s hills which came to signify both the city and the Land of Israel as a whole; Palestine, derived from Philistia, and first used by the Romans; the Promised Land; and the Holy Land, to mention but a few. However, to most Israelis today, the country is simply Ha’aretz — the Land. Over 7 million people live in Israel today; some 5.4 million Jews and 1.4 million Arabs. A wide spectrum of lifestyles characterizes the country, ranging from religious to secular, from modern to traditional, from urban to rural, from communal to individual.



ABOVE: Gan Hashlosha Nature Reserve.

water tables, tapped in controlled quantities to prevent depletion and salination, are also utilized.

As maximum use has been made of all freshwater sources, ways are being developed to exploit marginal water resources through the recycling of waste water, cloud-seeding, desalination brackish water, and desalination of seawater.

To overcome regional imbalances in water availability, most of Israel’s freshwater sources are joined in an integrated grid. Its central artery, the National Water Carrier,

completed in 1964, brings water from the north and central regions, through a network of giant pipes, aqueducts, open canals, reservoirs, tunnels, dams and pumping stations, to the semi-arid south. ♦

The Water

Located on the edge of a desert belt, Israel has always suffered a scarcity of water. Archeological discoveries in the Negev and other parts of the country reveal that local inhabitants thousands of years ago were already concerned with water conservation, as evidenced by a variety of systems, designed both to collect and store rainwater and transfer it from one place to another.

The total annual renewable water resources amount to some 60 billion cubic feet (1.7 billion cu.m.), of which about 65 percent is used for irrigation and the balance for urban and industrial purposes. The country’s water sources consist of the Jordan River, Lake Kinneret, and a few small river systems. Natural springs and underground

KEREN KAYEMET – the Jewish National Fund was founded (1901) to purchase land for Jewish agricultural communities, as well as to carry out development, reclamation and afforestation projects in the Land of Israel. By the time Israel became independent (1948), the JNF, with funds collected from Jews all over the world, had bought some 240,000 acres, most of which had to be redeemed from centuries of neglect, and had planted about 4.5 million trees on the country’s rocky hillsides. Today over 200 million trees in forests and woodlands covering some 300,000 acres provide Israelis with a wide range of opportunities for outdoor recreation and appreciation of nature. While continuing its activities of afforestation and forest maintenance, the JNF also develops parks and recreation sites, prepares infrastructure for new communities, carries out various water-harvesting projects and is an active partner in environmental conservation efforts throughout the country. www.kkl.org.il

The Living Dead Sea

The Dead Sea, the lowest point on earth at about 1,300 feet (400 m.) below sea level, lies at the southern end of the Jordan Valley. Its waters, with the highest level of salinity and density in the world, are rich in potash, magnesium and bromine, as well as in table and industrial salts. The Dead Sea’s natural pace of recession has been accelerated in recent years due to a very high rate of evaporation (5 feet - 1.6 m. annually) and large-scale diversion projects undertaken by Israel and Jordan for their water needs, causing a 75 percent reduction in the incoming flow of water. As a result, the surface level of the Dead Sea has dropped some 35 feet (10.6 m.) since 1960. A project to link the Dead Sea with the Red Sea by means of a canal and pipe system, which may help restore the Dead Sea to its natural dimensions and level has been under consideration, and received a major boost when real

TOP LEFT: Marker of “the lowest point on earth” at Kibbutz Beit Haarava.

TOP CENTER: Sumo wrestlers proclaim “I love Israel” in Dead Sea mud.

TOP RIGHT: Salt crystal formations in the Dead Sea.

BOTTOM LEFT: Sumo wrestler floating in the salty waters of the Dead Sea.

BOTTOM CENTER: Bather smearing mineral mud on her face.

BOTTOM RIGHT: Dead Sea view of ancient city of Masada.

estate mogul Yitzhak Tshuva unveiled his construction plans for the building of the Red Sea-Dead Sea canal, which is to run from the Israeli port city of Eilat on the Red Sea, 200 km to the Dead Sea.

The Israeli billionaire told the “Facing Tomorrow” presidential conference in Jerusalem that Saudi prince Al-Walid bin Talal, whom he had met at his Plaza Hotel in New York earlier this week, had voiced willingness to invest in the project, which aims to provide electricity and potable water to Jordan, Israel and the Palestinian Authority.

Tshuva said that the prince was ready to begin working on the project immediately, in coordination with Jordan. He quoted the Saudi prince as saying that peace and economy go hand in hand, and that it is inconceivable that a peace accord is signed by people who can’t afford to feed their children. ♦

-Ha’aretz, 5/15/08



Negev

The Final Frontier

As Israel's population grows, its central region is running out of space. The Negev desert is a massive land reserve that represents 60% of the country.

The government of Israel has committed \$4 billion to revitalizing the Negev. Blueprint Negev is JNF's part of this broad vision for a strengthened southern region. With our partners – KKL, the Israeli government, other organizations, private and corporate investment – we are helping to:

- Bring economic opportunity to existing Negev communities that have suffered from high unemployment, stagnant population growth and hopelessness for decades.
- Create new planned communities outside of existing cities, bringing a new vitality to the region.
- Protect the Negev's open spaces and ecosystems through sustainable development practices.
- Improve the quality of life of all the region's citizens, working with the leadership of the Bedouin communities to improve infrastructure, rehabilitate rivers and provide green spaces for recreation.
- Stop the flow of young people out of the country by providing affordable housing and employment options outside of Israel's crowded center.
- Promote the many tourism sites throughout the region
- Develop alternative, renewable energy sources to provide for Israel's future.

"The Negev will be the test of the creative ability and pioneering valor of Israel." These words, spoken by the visionary David Ben-Gurion, have never held more significance and truth. ♦

***"The Negev will be the test of the creative ability and pioneering valor of Israel."
-David Ben Gurion***



TOP: The Middle East photographed from the Space Shuttle Columbia.

ABOVE: mountains in the Negev Desert.

LEFT: People traveling through the mountains of the Negev.

WEB RESOURCES

JNF Blueprint Negev Project:
www.jnf.org

Arava Institute:
www.arava.org

Ben Gurion University of the Negev - The Jacob Blaustein Institutes for Desert Research:
cmsprod.bgu.ac.il

Nature Conservation

In efforts to conserve the natural environment, stringent laws for the protection of nature and wildlife have been enacted, making it illegal to pick even the most common roadside flowers. Charged with the advancement of nature preservation, the Israel Nature and Parks Authority (INPA) strives to protect the landscape and natural environment. Over 150 nature reserves and 65 national parks established throughout the country under the authority's supervision encompass some 400 square miles (nearly 1000 square kilometers). About 20 reserves have been developed for public use with visitors' centers, roads, and hiking trails, attracting over two million people every year. One of Israel's important regions — Mount Carmel — was declared a biosphere reserve within the framework of the Man and Biosphere Program of UNESCO.

Environmental Protection

Rapid population growth and steady expansion of agriculture and industry have contributed to environmental deterioration, especially in the coastal area, where more than half of Israel's population and most of its industry are concentrated. To combat pollution of the Mediterranean and Red Sea coastlines, Israel has adopted a multifaceted program of inspection, legislation, enforcement, shore clean-ups, and international cooperation, primarily within the framework of the Mediterranean Action Plan. Under conditions of water scarcity and intensive development, the degradation of water quality is a critical problem. The main causes of groundwater pollution are chemical fertilizers, pesticides, seawater intrusion, and domestic and industrial wastewater. High priority has been given to wastewater treatment to safeguard its effects on the environment and public health and to develop an additional water source for agricultural irrigation. A recently approved plan for water management stipulates seawater and brackish water desalination, improved wastewater treatment for reuse purposes, efficient water production and water conservation. A rehabilitation program for polluted streams has been initiated with the aim of transforming them into freshwater resources with ecological and recreational value. The quality of drinking water is strictly supervised.



ABOVE: View from the Mount Carmel reserve.

WEB RESOURCES:

Israel Ministry of Environmental Protection:
sviva.gov.il

Israel union for Environmental Defense:
www.iued.org.il

Coral Reef - Israel Oceanographic Institute:
www.ocean.org.il

The Inter-University Institute for Marine Sciences:
www.iui-eilat.ac.il

Factors affecting air quality include energy production, transportation, and industry – and all three have increased dramatically in recent years. The use of low sulfur fuel for energy production has helped reduce concentrations of sulfur dioxide considerably, but pollutant emissions linked to increased vehicular traffic have risen significantly. Lead-free gasoline, catalytic converters, and lower sulfur content in diesel fuel have been introduced to mitigate the problem. A nationwide monitoring system is providing updated information on air quality throughout the country. Israel also strives to comply with international resolutions on ozone depletion and climate change.

Rapid growth in population, standard of living, and consumption have led to significant increases in solid waste in the order of 4%-5% annually. Most of the country's illegal garbage dumps have been shut down in recent years and replaced with environmentally-safe landfills. Efforts are being made toward integrated solid waste management, which will include reduction, recycling, recovery, and incineration. Recent recycling regulations should facilitate the shift to low- and non-waste technology. "Cradle to grave" management of hazardous substances is based on licensing, regulation, and supervision over all aspects of their production, use, disposal, and treatment. Enforcement of legislation, implementation of a national contingency plan for integrated emergency response to accidents, and remediation and upgrading of the national site for hazardous waste should minimize potential dangers to health and the environment.

Enforcement of environmental legislation is a top priority alongside environmental education, from kindergarten to university. The public takes part in environmental law enforcement as anti-litter trustees and animal welfare trustees are empowered to report on violations of the respective laws. Economic tools are increasingly used to promote environmental improvement, both in the form of financial grants to industries that invest in pollution prevention and in the form of taxes and levies on polluters. In line with the principles of sustainable development, efforts are directed at resource conservation and prevention of pollution in all economic sectors. ♦

Concrete and Corals

Coastal Preservation and Renewal of Coral Reef

Written by **Meredith Price Levitt**,
The Jerusalem Post, May 7, 2008 (excerpts)

For most people, the idea of concrete blocks replacing coral reefs might seem far-fetched. But for a group of marine scientists at Ben-Gurion University of the Negev, it is just what the doctor ordered. Sturdy enough to last, yet porous enough to be implanted with corals, concrete is the basis for an innovative technique that may help save coral reefs in the Red Sea from further destruction from overzealous divers ...

...The Red Sea has a reputation for being one of the most spectacular places to dive, and Eilat attracts thousands of vacationers a year, most of whom come to dive and snorkel in the coral reefs. But the very attraction they come to enjoy is suffering from the intensive tourism, and more and more of it is disappearing every year. ...



ISRAEL BONDS PROJECTS:

Proceeds from the sale of Israel bonds are utilized by Israel's Finance Ministry for economic development. Early projects included:

- **The National Water Carrier**, which irrigated nearly half a million acres and allowed Israel to become agriculturally self-sufficient.
- **The Dead Sea Works**, which extracted potash and bromine and became Israel's first major industrial complex.
- **Port development and expansion in Ashdod, Haifa and Eilat** that opened gateways to Europe, Asia and Africa.
- **The Hadera power plant**, which helped alleviate Israel's chronic lack of energy resources.

WEB RESOURCES:

Israel Bonds:
www.israelbonds.com

Israeli-Jordanian Team set up First Artificial Coral Reef in the Red Sea

Written by **Nicky Blackburn**, August 08, 2007
(excerpt from *Israel21c*)

...According to Dr. Nadav Shashar, a marine biologist at Ben-Gurion University of the Negev who worked side by side with Dr. Faud al-Horni in Jordan on the project funded by the US State Department's USAID-MERC program, the challenge was to find a solution that would go beyond mere conservation without limiting tourism. ♦

Israel Bonds

Building National Water Carrier and Other Infrastructure Projects

The idea to float bonds was conceived by Prime Minister David Ben-Gurion in the aftermath of Israel's War of Independence. The nation's fledgling economy was devastated and Ben-Gurion decided to turn to the Diaspora community for help.

His concept was two-fold: to obtain millions of dollars in funding for immigrant absorption and construction of national infrastructure; and to engage Diaspora Jewry in the building and development of the new Jewish state.

It was shortly thereafter, in 1951, that the Israel Bonds organization, at David Ben-Gurion's initiative, entered the scene. Israel Bonds gave Israel's supporters the world over an historic role to play, becoming – and remaining – an essential means of building Israel's economic infrastructure.

Since its founding, Israel Bonds has raised over \$25 billion in investment capital for Israel. ♦

TOP LEFT: Eilat: Underwater observatory in the coral reef (Red Sea).

BOTTOM LEFT: Yellowsaddle Goatfish and Yellow Trbinaria, Red Sea.

RIGHT: National Water Carrier in the Beit Nekofa Valley.

