Eco-tourism at Tamar Regional Council
Ein Tamar and Neot Hakikar

The Sodom Salt Flat is a unique, rare habitat in Israel. It is home to a unique ecosystem that contains a large number of endangered species. The most prominent of these is *Caprimulgus nubicus*, the Nubian nightjar, a nocturnal insect eating bird, and the Sodom Salt Flat is the last place in which couples of this species remain.

The Moshav settlements Ein Tamar and Neot Hakikar are located in the core of the salt flat, between the southern pools of the Dead Sea and the desert ravines and marls. The council is currently leading a new planning of the region to transform the Kikar Sodom area into a lifeline that connects the Dead Sea to the Peace Road to Eilat, in order to complete the unique tour route in the part of the country – from Highway 90 to Eilat via breathtaking landscapes and environments. The entrance gate to the Shalom Road will be set at the Sodom eco-park, which reveals and provides access to an agricultural Zionist settlement, unique environmental and landscape conditions, rare flora and fauna and more. The Kikar Sodom route will complete the existing road and will allow for direct landscape tourism between two of the most toured sites in the country – the Dead Sea and Eilat. In addition, the move will provide access to trails and routes that reveal unfamiliar heartland scenery. This development will allow for adding and developing unique desert eco-tourism, in the existing landscapes of the Judean Desert.

Southern cluster

The Tamar Regional Council is located at the lowest point on the earth’s surface. Its eastern border is the Dead Sea. To the south, the council borders on the Arava region and to the west, the exciting wild views of the Judean Desert, the Ha’he’etekim Cliff and the desert heights. In the heart of this charming primordial landscape, there are unique, diverse communities that maintain a unique model of sustainable settlement – the settlements of the council live and develop based on respect for their surroundings and faith that the settlement must develop alongside its surrounding protected natural values. The enterprising and economic divisions in the settlements are based on natural resources, making them accessible to tourists and visitors and joint action of man and environment. The Tamar Regional Council has been a leader for many years of this complex fabric, based on the wish of forming a unique model in Israel of quality community life that is based on natural and environmental values. In recent years, the council has been aiming the action in its field based on the belief that in order to develop settlement, it must produce additional models for unique eco-tourism that will constitute a strong basis for settlement-oriented economic development.

I invite you to read this guide, which covers the entire spectrum of the council’s activity. In addition to figures and data on the settlement and the development plans of the council, you will be able to find in the booklet professional information on the environmental values of the region and the natural wonders surrounding the Tamar Regional Council.

Best regards,

Dov Litvinoff
Mayor of the Tamar Regional Council
The Dead Sea
Southern cluster

Sodom Eco-Park

Sodom Eco-Park is the gateway not only to the southern Dead Sea settlements, but also for numerous hiking and biking trails of various levels, that allow enjoying a taste of natural desert, wild, unfamiliar grounds. Sodom Eco-Park was founded at a central point, for the purpose of allowing a glimpse into the world’s special climate conditions, wildlife and flora that exist here.

The park reveals a mysterious and magical landscape, previously known only to experts. The types of flora planted in the park have been carefully selected and were meticulously examined in order to suit the location, and they constitute a live museum, revealing the surprising and rich nature of the salt flat. Sodom Eco Park serves a double purpose; The park was primarily designed to serve as a preserved unique land that will allow animals and flora to thrive, and at the same time it allows the many visitors who come here to enjoy a once in a lifetime desert experience. Sodom Eco-Park integrates environmental and landscape values with an unusual touristic experience.

We are currently completing the planning of Stage B of the park, which will include the construction of an ecological pool simulating a moist habitat, and alongside it the development will continue in the spirit of the place, and other unique species will be planted. Expansion of the park will allow for continuing the development of tourism fields that are unique to the region and the activity of the park, which serves as a starting point for tour and riding routes in the region.

Cycle path at the southern Dead Sea

In the Kikar Sodom and Wadi Heimar region, there are dozens of cycling routes at different levels of difficulty, providing for a combination of a challenging experience and family riding. The council is currently leading a plan to find, regulate and mark the paths, with the aim of positioning Kikar Sodom as a leading cycling resort. The cyclist meeting and service point will be established in the Sodom Eco-park, from which tourists will be directed to the various routes. The hot weather prevailing in the region throughout the year will also allow for the marking of nighttime routes and routes that will be especially adapted for riding during the winter, when the weather is perfect.

Ein Tamar and Neot Hakikar

Neot Hakikar and Ein Tamar are agricultural settlements that employ advanced and unique agriculture. In spite of the harsh conditions and against all odds, agriculture flourishes in this region. The hot and extreme climate, the barren salty soil and the highly salty water surprisingly contribute to sweet and juicy agricultural produce, exported to all ends of the world. The agricultural produce of Kikar Sodom settlements are famous for its succulent peppers, quality tomatoes, meaty eggplants, sweet watermelons, melons and many more.

In recent years, the council has made a huge effort to prepare plots for construction and has designated many areas for agriculture within a national project. In view of these, the moshavim are now facing significant absorption of new residents, which will strengthen the unique activity of the region, and desert eco-tourism that is possible only in this unique region will develop alongside agriculture.
Unique flora

In Hebrew, the term "salt flat" is composed of the words "salt" and "moist" and it describes a natural landscape whose soil consists of a high quantity of salts. The composition of the soil allows only a select number of plants to grow in it – those that can cope with the extreme salty conditions. The Sodom Salt flat constitutes a unique habitat thanks to its high underground water and the numerous sweet water springs in its outskirts, which enable the plants to thrive.

Among the plants unique to the salt flat, we can count the Salvadora Persica, Populus Euphratica, Suaeda Monoica, Tamus major and Phragmites Australis. In addition, groups of wild dates grow in the area, creating oases throughout the salt flat. Much of the area of the salt flat is inaccessible, and it is very important that this condition is preserved, in order to allow for the normal function of the special ecological system sustained in this region and to preserve the rare wildlife that exist only in this area.

Wildlife

Kikar Sodom and the southern Dead Sea are considered an ecological gem due to the particularly large variety of wildlife in the area. Among the wildlife here, you can find mammals such as the wild boar, the caracal, the hyena and the jackal. Among the birds, one can find the Dead Sea sparrow (Passer Moabiticus) and many species of occasional birds that utilize the area to rest during migration.

One of the rarest species in this area is the Nubian nightjar (Caprimulgus Nubicus) – a small nocturnal bird, declared as an endangered species. Most of the Nubian nightjar population lives in the thicket of the salt flat around Kikar Sodom. The Nubian nightjar feeds on a variety of insects, mainly moths, which it catches while flying fast, mainly during clear moonlit nights. The Nubian nightjar is a "ground nester", meaning, it does not nest on trees, and in order to protect against predators it hides between the thick salt flat plants during the day. At night the Nubian nightjar goes hunting, and its main activity takes place over the water canals and the agricultural areas of the Ein Tamar and Neot Hakikar settlements.

In this region, that constitutes the Nubian nightjar’s most northern nesting point in the world, only dozens of birds are left, and they attract ornithology lovers from across the globe.
Neve Zohar – the community expansion of the settlement Neve Zohar is due to be built on the waterline, facing the exciting Moab landscape. The developing settlement will be wholly based on environment tourism based on nature’s resources: water, land, sun and clear air, and will offer a rural tourist experience that differs from that which will be offered in the tourist resort developing between Ein Bokek and Hamey Zohar, where the emphasis will be on hotel based accommodation. A promenade system will connect the settlement to the hotel area, so that tourists in the region will be offered a complementary experience that includes diverse tour options and a high quality, accessible and newly developed beach.

Neve Zohar – Har Amasa
The central development cluster in the council region is the most unique and diverse in its area. To the east lies the developing community settlement Neve Zohar, which touches the waterline at a height of -390 meters below sea level, and to the west lies the ecological village Har Amasa that is 850 meters above sea level! On the western border of the council is the ecological village Har Amasa, which is located on the eastern end of the Yatir ridge, at the end of the country’s largest pine forest and near the Har Amasa nature reserve, which is full of footpaths. The location of the village, with the Hebron Mountains to the north, the Judean Desert and the Dead Sea to the east and the Arad and Beir Sheva valleys to the south, forms a unique combination of plant and animal species, as well as archeological evidence of settlement throughout history. Near the settlement lies the Israel National Trail – the country’s most important footpath.

Har Amasa
Har Amasa was built as a kibbutz in the 1980s. In the last two years, the settlement has changed its look and has been redefined as an ecological village, and has experienced an impressive growth spurt since then. The absorption procedure was conducted with the accompaniment of the council, with the aim of maintaining the unique character of the village’s community; a diverse, multi-age population of artists and composers, academicians, practitioners of liberal professions, farmers and more. The cornerstones on which the Har Amasa community is built are tolerance and willingness to live together with mutual respect and love of man, environment and earth. The settlement has an existing neighborhood and preparations or building and marketing a new neighborhood that will significantly expand the settlement are currently being completed. Coexistence between man and environment is what guides the planning of the rejuvenated settlement, the character of the neighborhoods and building of houses.
Natural phenomena

Drying of the Dead Sea – the northern basin – the Dead Sea is the lowest place on earth (-427 m below sea level), and formed as a result of a geological process that started 25 million years ago and is continuing to this day. Due to the location of the sea, water has always drained into it from throughout the region – from the southern Jordan River, from the desert streams in Israel and Jordan, which drain into it from the east and west.

The Dead Sea is losing about 750 million cubic meters per year, and its level is dropping by more than a meter a year!

Why?

The receding water level in the northern basin

The Degania dam – this was built at the northern end of the southern Jordan River in order to run the power station at Naharayim. After the station was shut down and the national water carrier was built in the 1960s, the dam’s purpose was changed, and it is used for pooling of water in the Sea of Galilee for supplying the national water carrier.

The Jordan River – used to provide about a billion cubic meters of water a year, today it supplies only about 100 million cubic meters.

The water crisis in Jordan – due to the water crisis of the Kingdom of Jordan and the massive agricultural development on the Jordanian side, the running rivers that used to drain into the sea were dammed and their waters were redirected for human applications.

The potash works in Israel and in Jordan – the operators produce products using the substances and minerals in the Dead Sea. The process of extraction of substances is based on collection of the raw material from the bottom of evaporation pools, which are formed in the southern basin of the Dead Sea. For filling the pools, the works draw water from the northern basin of the Dead Sea and run it through an artificial canal directly into the evaporation pools.

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Evaporation – the high temperatures prevailing in the Dead Sea Rift area during most of the year cause a high rate of evaporation of seawater.

The rising water level in the southern basin

The spectacular water body in the southern Dead Sea has been detached for years from the natural northern basin of the Dead Sea, and is effectively part of the evaporation pools of the Dead Sea Works (APC) in Israel and the potash works in Jordan. While on the Jordanian side of the sea, the southern basin was dry until the potash works were built there in the 80s, on the Israeli side of the sea, the water was contained in the evaporation pools, before the drains were separated in 1977.

Pool No. 5, along whose shore the Dead Sea hotels and the settlement Neve Zohar are located, is the largest evaporation pool of Dead Sea Works, of approximately 80 square km area, at which the potash production process effectively begins. Following the process, formation of salt layers precipitates on the bottom of the pool each year, increasing the water level by 20 cm. This means that while the natural northern basin of the Dead Sea is receding by more than a meter of height each year, in the southern basin, the opposite is happening, with the water level rising by approximately 20 cm a year.

The accumulation of salt over the years has led to a rise in level that has endangered the Dead Sea hotels operating on the edge of the pool. In recent years, a national effort has been underway to perform works to repair the damage resulting from the rise, regulate and render accessible the beaches and restore the landscape-environment system. This move will result in a regional balance that combines tourism and industry at a single site, without damaging other areas that are highly sensitive in environmental terms.
The State of Israel is currently investing in the transport of the Government Company for Protection of the Dead Sea, the Tamar Regional Council, the Dead Sea Drainage Authority. The objective of this union is to restore the damage caused by the drop in the level of the Dead Sea in the northern basin and in restoration of damage caused by the rise of the artificial level in the southern Dead Sea. This enormous national project will rearrange the entire tourism industry in the region and lay down the ground for connecting all tourist sites using trails, promenades and cycle paths that will allow for an open air touring experience.

Environmental rural tourism in Neve Zohar

within the restoration project, the Tamar Regional Council is leading the integration of the settlement Neve Zohar, whose borders are in the area to the south of the overall system. Within the settlement there are public buildings of historical value, such as Beit Hayotzer and the Neve Zohar hostel, which the council is proposing for recycling and use for developing additional tourism channels that have a unique character derived from their location.

Footpaths and accessibility to independent tourists

The Judean Desert is a unique tract of land that offers an enormous range of experiences and routes between desert and mountain – from the lowest point on earth, to the clear air on peaks near Har Amasa. The council is advancing a series of collaboration efforts with environmentalist organization with the aim of further marking and branding long footpaths and cycle paths that will allow for various connections to be made to the Israel National Trail and leading tourist sites in the country.

**Rom – Yizrach**

**Map:** Southern Judea Desert No. 11
**Duration of route:** 4-5 hours
**Length of route:** 4-6 km (route may be ended at Zohar stronghold or continued to the fuel station below Zohar Junction)
**Difficulty level:** moderate
**Start and end points:** parking bay on the service road between the northern and southern hotels.

**Description of the route:** a challenging climb between rocks on the slope of Wadi Rom, until reaching Mount Yizrach that overlooks the Dead Sea and the surrounding area. The stream bed has many acacia trees that afford shade, and at its end, at the top of the marl rock, lies Zohar stronghold, an ancient stronghold that was used as a guard post on the Edom Road, which was probably passed upon in biblical times.

**Wadi Zohar**

**Map:** Southern Judea Desert No. 11
**Duration of route:** 2-3 hours
**Length of route:** 2 km
**Difficulty level:** moderate
**Start and end points:** start at Zohar stronghold (entrance opposite Neve Zohar) and ending at the fuel station at Zohar Junction.

**Description of the route:** from Zohar stronghold, the ancient stronghold that was used as a guard post, one descends the meandering, shaded bed of Wadi Zohar. A stimulating walk between large rocks and a descent at a small waterfall that formed due to the undermining of the stream.
Kibbutz Ein Gedi

Kibbutz Ein Gedi is the largest settlement in the council’s jurisdiction. The kibbutz lies in the heart of a magnificent botanic garden, and is located in a busy nature site, between the Hahe’etekim Cliff and the western shores of the Dead Sea. For several years, the council has been advancing procedures to expand the community in the kibbutz and absorb families from throughout Israel who will be coming to join and develop the unique fabric by the region’s rare national resources. Currently, two plans are being advanced, one being for restoration of infrastructures and recycling of buildings in the old neighborhood of the kibbutz, and the other being a plan for building a residential neighborhood for absorbing communities on the cliff slopes facing the Dead Sea.

Ein Gedi – Masada

The northern development cluster of the council extends from Ein Gedi Oasis at the north to Masada. Ein Gedi oasis contains the most beautiful and jagged natural resources in the region. The centerpiece of this oasis is the David and Arugot streams, magnificent desert oases that abound with unique plant and animal species. In Ein Gedi Oasis you can encounter Nubian ibexes, rock hyraxes, and countless other animals such as foxes, jackals and many bird species. The cold, sweet water continues to run through the David and Arugot streams throughout the years, and it serves as a perfect haven for humans and animals during blazing summer days. Near the nature reserve is Ein Gedi Beach; the Beach is free to all and is the only public beach in Israel located on the natural shore of the Dead Sea, and to its south is Kibbutz Ein Gedi. Kibbutz Ein Gedi, the oldest settlement in the council, is immersed in the green foliage of a botanic garden containing more than 1,000 plant species most of which have arrived from Madagascar. This is the only botanic garden in the world in which a community lives.
Sinkholes

“Now the Valley of Siddim was full of tar pits, and when the kings of Sodom and Gomorrah fled, some of the men fell into them” (Genesis 14:10)

The Dead Sea’s drying process has a direct effect on the region, and is the cause of the appearance of sinkholes. The first report on the holes that are gouged into the ground in the northern part of the Dead Sea were first received in the 1980s, but in the 1990s their number increased rapidly and today there are estimated to be more than 5000 holes, with several hundred more forming each year. As a result of the receding sea level, underground saltwater is dropping, and is being replaced by sweet groundwater that dissolves the salt layers that were originally there. These underground cavities collapse the thin soil layer remaining above them, resulting in a sinkhole forming. The sinkhole problem is primarily a threat to infrastructures, bridges and first and foremost Highway 90, which crosses Israel from north to south, currently in the Wadi Arugot area, requiring Highway 90 to be diverted towards the Ein Gedi nature reserve due to the threat that the sinkholes pose to the integrity of the road and the safety of its users.

Hyrax

“The high mountains belong to the wild goats; the crags are a refuge for the hyrax.” (Psalms 104:18)

Like the ibex, the hyrax lives in groups and has good climbing ability and is able to evade predators rapidly. The hyrax feeds on vegetation in the area, including toxic plants such as apple of Sodom (Calotropis procera), due to a special addition to its intestines that helps it absorb toxins. The hyrax’s body temperature is not constant and varies with ambient temperature. During cool days, hyraxes may be found basking on rocks, trying to take up as much heat as possible from the sun. The hyrax’s sense of sight is quite developed and is better than that of other animals of its size.

Ein Gedi Beach

The beach is located at a beautiful observation point, and is the only public beach on the side of the sea’s natural basin. In recent years, the beach has been suffering from severe damage that it has sustained as a result of a drop in the sea level and damage from floods; that have intensified from year to year as a result. Alongside a specific project for saving and restoring access to the beach, the council is now leading a showcase project for rendering the beach accessible and reopening it as an accessible, attractive site for tourists and visitors, where the unique properties of the sea and the challenges that we are facing as a result of its recession may be studied.

The University Research Institute at Masada

The location of the institute was established near Israel’s most popular tourist site, Masada, an international legacy site, which gathers environment and heritage values from which the institute will draw its power. Expansion of the kibbutz will allow for the Dead Sea and Great Rift Valley University Research Institute that is currently being built at Masada in cooperation with Tel Aviv University to gain momentum.
Wadi Arugot
Map: Southern Judea Desert No. 11
Duration of route: 3 hours (to the hidden waterfall and back), 6 hours (to the upper pools and back).
Length of route: 6-6 km
Difficulty level: moderate
Start and end point: Wadi Arugot parking lot – circular route
Description of the route: a beautiful stream that receives water from springs that provide water throughout the year. Animals that visit the stream can be seen on the way, such as ibexes and hyraxes. People who are interested in doing so, may continue to the upper pools.

Masada Marl
Map: Southern Judea Desert No. 11
Duration of route: two hours
Length of route: 1.5 km
Difficulty level: easy
Start and end point: Masada parking lot
Description of the route: a walk between the impressive marl hills at the bottom of the Masada Mountain, the remains of an ancient lake – Lake Lisan. You can see that each hill consists of thousands of small shelves, black and white. Each such shelf symbolizes a season, leading to the conclusion that the hills are thousands of years old!

Summary – eco-tourism at Tamar
Throughout its years of existence, the Tamar Regional Council has developed based on respect for the environment and safeguarding the protected natural values that characterize the region. In recent years, the council has been leading a unique development line, in which each future development in the jurisdiction of the council – for tourism and settlement alike – will be executed following an environmental analysis and based on protected natural values that are to be safeguarded on the one hand, and which are to be wisely rendered accessible to tourists on the other hand. In this spirit, we have seen in recent years, development of unique tourism ventures – sleeping khans, rural recreation sites and business initiatives based on natural resources, developing alongside the famous hotel area in the southern Dead Sea, affording for the first time a unique tourism alternative at the Dead Sea.

We are proud of the transformation of the council’s vision into reality, and invite you to share this development and action.