

Alon Tal is on the faculty of Ben-Gurion University and is presently a visiting professor at the Stanford Center for Conservation Biology. He chairs the Land Development Committee at the Jewish National Fund that oversees policy for Israel's forests.



As Israel becomes a predominantly urban society and population density grows (Hann, 2013), fewer citizens are able to enjoy a connection with open spaces and with natural ecosystems on a routine basis. Like people in other rapidly urbanizing countries, some Israelis face alienation from the natural world and a distancing from national parks and nature reserves due to a lifetime of city living. Yet for the majority of Israelis, who carry with them a collective or familial tradition of love of homeland, hiking, and nature (Almog, 2000), the opposite is true. The majority of Israeli citizens from across the mosaic of this diverse society recognize the significance of national parks, reserves, and forests in particular, in their personal strategy for enjoying their leisure. These magnificent places increasingly provide a valued destination for citizens and tourists.

Beyond the provisioning and regulating ecosystem services that these lands provide, Israel's parks, reserves, and forests provide cultural ecosystem services whose value is only now beginning to be characterized (Tal, 2013). People flock to

them, especially on Saturdays and on holidays with their families, friends, and fellow hikers and cyclists. Sometimes they head out alone to Israel's open spaces and enjoy the fresh air, history, serenity, and contemplative solitude. Israel's parklands provide exciting memories for visiting pilgrims and for local school children. By offering a window into the country's past and present identity, they constitute a geographical filling station for national spirit and fuel the morale of tomorrow.

This chapter opens with a brief history of Israel's parklands, describing the origins of the three essential recreational open spaces: national parks, nature reserves, and forests, which offer valuable leisure-time destinations. Then the chapter considers the sociological profile of visitors who use these parks. In a multicultural society such as Israel, this requires a brief discussion of the myriad ethnic groups' orientation to parks and recreation. The chapter then turns to the experience provided to those who frequent the parks and reserves of the country: what they seek and what they find. Finally, the chapter considers the future

of Israel's parks and nature reserves. This includes challenges such as financing the supervision and regulation of visitation (as well as wildlife management), providing appropriate infrastructure and support for different communities of visitors (including foreign versus local, people with handicaps and the aged), and ensuring that an optimal balance between the competing historical, natural, and active recreational uses is preserved for the future.

As Israel becomes more crowded and open spaces more scarce, a thoughtful and conscious development strategy will be critical to ensuring that maximum aggregate and individual benefit for visitors is attained. It also will determine whether societal motivation may be maintained to preserve these islands of natural beauty, history, and human enjoyment.

### ISRAEL'S PARKS AND NATURE RESERVES

Prior to the British Mandate, no formal parks or reserves were set aside in Turkish Palestine. The British Mandate began its stay in 1918 by making a bold commitment to reforesting the land of Israel, which had been essentially denuded of trees and natural vegetation after almost 2,000 years of foreign occupations. In fact, their planting efforts were largely unsuccessful. The area afforested by the British Mandate government during its 30-year regime was only 5,400 hectares (1 hectare = 2.47 acres)—0.2% of the lands in Palestine or 0.5% of its nondesert regions (Tal, 2013). This area is smaller than the 5,640 hectares planted by the new State of Israel in 1951 alone (Weitz, 1970).

Yet, by the time they departed Palestine 30 years later, British foresters had managed to declare an impressive 166 areas as forest reserves, covering a full 64,000 hectares of land, of which 10% were designated to be closed to the public to facilitate regeneration (Government of Palestine, 1946). For the most part, the

status of these early reserves persists to this day, albeit most of the forest reserve operational zoning rules have been trumped by those associated with Israel's more recent system of reserves and parks.

During the 1950s, Israel muddled forward toward a preservation program for its outstanding natural and historic sites. In 1951, the Sharon Plan was published. It was a conceptual master plan that the government commissioned that envisioned a series of parks throughout the country, although this part of the plan was never fully implemented. In parallel, a committee headed by Yosef Weitz, the chief forester of the Jewish National Fund (JNF), recommended a network of six large parks with a combined area of 40,000 hectares. Nature advocates at Israel's nascent green nongovernmental agency, Society for Protection of Nature in Israel, were extremely dissatisfied with both approaches and countered with a more expansive proposal for a national park system (Tal, 2002).

As the potential for tourism—international and internal—began to emerge, the Director General of the Prime Minister's Office Teddy Kollek pressed for a decision. He initiated a statute that reached the Knesset floor and catalyzed a debate that would eventually lead to the present division of recreational open and historic spaces in Israel. The proposed National Parks and Nature Reserves Law asserted in its explanatory section that

the existence of large and crowded population centers requires the proactive designation of appropriate areas for national parks and their leasing as recreational sites, and places of entertainment, nature and heritage education. Attaining these objectives requires development and planning, paving of roads and trails, building youth hostels, fencing certain places, and posting signs of explanation, etc. For this, appropriate bodies need to be



established. (Israel Government Press, 1962)

Israel's young and aggressive conservation community and its Parliamentary representatives were still unhappy with the narrow vision of the legislation and the national parks envisaged. Unlike the largely historic, archaeological tourist attractions, they dreamed of vast expanses where evolution could continue unfettered. They believed that these ancient landscapes and ecosystems should be preserved so that future generations may also appreciate a healthy and holy land.

Eventually, Israel's founding Prime Minister David Ben Gurion had to weigh in on the dispute. In defending the law, he railed,

The National Parks and Nature Reserves Law is coming to protect the landscape of the land and the historically significant sites – and to preserve them for our children and for future generations. In these times, like the additional threats to the landscape associated with intensive development plans and the proliferation of cities. This should not be seen as a luxury, rather an essential educational and cultural need that will establish strong ties between the nation and its land. The direct connection to the natural landscape, to the land, to its history – this is what gives the inhabitants dwelling here a sense that they are citizens and residents. (Ben Gurion, 1962)

Rather than choose between the two visions of historic heritage and nature preservation, the Prime Minister supported a compromise proposed by his fellow Labor party parliamentarian—and noted novelist—Yizhar Smilansky (aka, S. Yizhar). Smilansky had happily agreed to speak on behalf of the environmental lobbyists from the Society for Protection

of Nature in Israel, who proposed two independent agencies: a National Parks Authority and a Nature Reserves Authority. Smilansky's speech describing the importance of nature reserve has been called the greatest environmental speech in the country's history (Tal, 2006). Smilansky (1962) said,

I fear that those proposing the law did not pay precise attention to the difference between two approaches: One improving the landscape of the land; and the second: preserving the landscape of the land. Here the emphasis is improvement and here preservation. One comes to save the equilibrium that exists on this tiny piece of the world, and one comes, head high, with the intention of enhancing, to make more efficient and to commercialize the existing – to give it “form” and “taste.”

The result was a bifurcated system with parallel but different bureaucracies and norms. Although the two land designations eventually were merged into a single agency in 1998, the law and regulations demarcating strategies for physical development and visitation remained as contrasting as Smilansky envisioned them 50 years ago. Parks celebrated human activities of the past, and nature reserves honored indigenous flora and fauna.

On November 26, 1964, Israel's first two nature reserves were declared as protected areas. Over the next 40 years, a tedious but steady process unfolded during which open spaces and historic sites were declared to be nature reserves and national parks. The politics of declaration are never simple, as local regional councils and cities are expected to give up jurisdiction. Many parks and reserves were delayed for decades. Slowly but surely the system progressed. Since 1964, some 380 nature reserves have been designed for an area of 650,000 hectares and 115

national parks were designated for 37,000 hectares. The vast majority of these lands have been legally declared and formally protected (Israel Ministry of Economics, 2013).

At the same time, the Jewish National Fund (JNF), a publicly owned corporation entrusted with afforestation activities in Israel, was busy planting trees. Although the initial use envisioned for the woodlands involved timber production, as the economics of an Israeli lumber industry became increasingly dubious, the JNF managers decided to prioritize recreation in its forests (Tal, 2012). In 1995, the new forests became nominally protected via a National Master Plan for Forestry. Roughly 10% of Israel's lands were set aside for a variety of forests. JNF recently began to invest significant resources in making its forests accessible to the public and comfortable, with thousands of picnic tables, grills, playgrounds, hiking and bike paths, restrooms, and even educational signage.

Today, Israel's parks, reserves, and forests comprise over one third of the nations' lands. They provide a critical refuge and playground for Israel's 8 million residents during their leisure time. In addition, they are central destinations for many of the 3.5 million tourists who visit the country each year on vacation, contributing to the \$36 billion annual economic boom from foreign visitors ("Ministry: Record number of tourists," 2012).

### WHO VISITS ISRAEL'S NATIONAL PARKS AND WHY?

During their free time, Israelis are avid visitors of parks, reserves, and forests. Israel's Nature Reserves Authority reported that every year over 8 million visitors come to Israel's network of parks and nature reserves: 6.1 million Israelis and 2.4 million foreign visitors (Masah Aher, 2010). The JNF (2012) reported that during the holiday of Passover alone in

2012, 2 million visitors frequented the forests it manages. A closer examination suggests that these estimates are not made systematically and that some may be extremely imprecise. Nonetheless, the number of visitors at the national parks, forests, and reserves of Israel continues to climb. On holidays, frequently by mid-morning, parks will close their gates to additional vehicles after reaching capacity crowds.

These sanctuaries attract a diverse assemblage of visitors from across Israeli society because they provide many visitor experiences. However, certain attributes common among users of this park system have been identified. From regular surveys conducted by the JNF in its parks and forests, visitors appear to be among Israel's higher income strata and with a better-than-average education. (Fleischer, 1993; Sappir-Gildor, Worschewoitz, & Tal, 2002; Tal, 2013). Although "high-profile" parks and sites attract visitors from near and far, for the most part, Israel's forests and national parks are visited by people who live within a 15-kilometer radius (Zalutsky, 2002).

Increasingly, the disparate ethnic and religious communities within Israel are finding the national parks, reserves, and forests to be attractive places to spend their leisure time. Israelis who emigrated from the former Soviet Union have proven to be particularly dedicated visitors to Israel's parks and forests. During the 1960s, the Society of Protection of Nature in Israel organized a highly successful campaign among Israelis to stop picking wildflowers. During the 1990s, it had to translate and disseminate the materials anew, after 1 million Russians moved to the country, as the "enthusiasm" of the new arrivals for nature in their new country was great. According to a survey of Russian speakers visiting forests, 92% had visited forests earlier that year, 76% had hiked in nature reserves and parks,

and 57% had visited nature reserves (Fleishman, 2005). Although these people showed a visceral appreciation of the sites, the majority had difficulty providing the name of the place where they were picnicking and hiking. The survey found a correlation between the level of education and the level of interest with nature among Russian speakers visiting natural areas during their spare time.

Arab Israeli citizens today comprise about 20% of Israel's population. Their initial relationship with Israel's parks, nature reserves, and forests may be characterized as one of general suspicion and alienation. This began during the British Mandate when the new forest reserves frequently supplanted traditional grazing areas that were highly eroded. The massive vandalism to the new saplings and forests that occurred was attributed to Arab unhappiness with the colonial orientation. Once established, Israel was also keen to plant forests, especially over abandoned Arab villages. Frequently the country placed forests and parks at the edge of Arab communities' municipal boundaries, as a untransparent mechanism for stymieing their proliferation. These practices and the associated enmity are long past.

Recent years have seen a transformation in the approach of land management agencies toward recreation in the Arab sector and response from Israeli Arabs. The new conciliation is found in the creation of special nature reserves designed to focus on educating Arab youth, such as the Ein Afek wetland park (Gilad, 2012). The change may be seen in olive picking festivals initiated by the JNF, which provide Arab citizens with a chance to participate in one of their communities' annual, historic rituals (Tal, 2013). The generally improved comfort levels of Arab individuals and groups are felt from the Bedouin in the Negev to the Galilee Palestinians, who increasingly spend their leisure con-

vening at picnics and gatherings in forests and parks.

The ultra-Orthodox Haredi community, which almost exclusively resides in crowded urban enclaves, is also revealing a growing interest in spending its free time in nature reserves and parks. Large numbers of Haredi families, as well as groups of youth, head off to the parks during the hot summer vacation period (*Bein HaZmanim*) and during nonreligious holidays when driving is permitted. (The Nature Reserves Authority staff complain of a tremendous elevation in the incidence of littering during this period.) A recent master's thesis (Dermer, 2008) considered the Haredi experience and in particular the inadequate preparation that leads to innumerable cases over the years of heat stroke, dehydration, and missing people. As young Haredim head into nature seeking adventures to release pent up energies from their intensive regimen of studying, they often find that they had never been taught to handle the associated challenges. In short, each ethnic group brings its own blessings and management challenges to Israel's parks.

One challenge for Israel's park managers is providing greater accessibility to visitors with disabilities. Some of Israel's most important national parks such as Masada and Caesarea are now largely accessible. Sprawling forests and reserves are a bigger challenge, but trails are being built that enable people in wheelchairs to get a closer view of some of the country's most important tourist sites and surviving natural places.

The profile of consumers at Israel's parks, reserves, and forests contains two unique cohorts relative to many other countries. First, soldiers, especially in combat units, find themselves conducting maneuvers on lands that are doubly zoned as nature reserves and training grounds. Navigation exercises that do not use live fire occur in some of the most

beautiful (and remote) reserves in the south. Although this does not involve conventional leisure time per se, frequently on days when training does not occur, such as the Sabbath, informal hikes into these areas occur. No less important, the exposure to wild natural areas at an impressionable age is later manifested in the Israeli obsession for treks and exotic trips after military service and the general culture of hiking in the country.

The second cohort involves children and adolescents as part of a special connection between Israel's youth movements and the parks and forests of the country. This is particularly common during the longer vacation periods—the summer, Passover, and Succoth. The educational package provided by Israeli youth movements includes outdoor activities such as hiking, survival, rope, and camping skills as well as environmental conservation work. Part of the implicit message that the participating children, from fourth grade through high school, take away involves leadership and self-reliance. But a conscious and subconscious educational message highlights discovery and appreciation of nature.

Close to 200,000 children, aged 9 to 17, belong to youth groups in Israel: from the Israeli Scouts to the Labor-affiliated Working Youth to informal educational frameworks for Orthodox, Conservative, and Reform Jewish children. A youth movement even exists for children with mental disabilities. However, youth movements do not reach every child. Only 20% of children joining youth movements come from poor socioeconomic backgrounds (Kashti, 2009). This suggests that the country needs to expand its outreach and find ways to reduce the financial barriers to children of less privileged families. Nonetheless, relative to other societies, young Israelis are not strangers to nature and their leisure during vacation is often spent in the national network of open spaces.

## THE RECREATIONAL EXPERIENCE

What recreational experiences do people seek during their free time at these parks and forests, and what do they actually receive? Economists Nir Becker and Yael Choresh (2007) asked visitors at the park at the Biriya forest in the Galilee to rank the aspects of their experience as visitors. Before nature appreciation, socializing, and even fun, they singled out aesthetics as offering the most moving and enlightening aspects of visits. This should not be surprising. The word *aesthetics* in Hebrew and in English is based on the Greek word *aisthetikos*—feeling (hence anesthesia is the opposite of feeling). Vistas and observation points received the highest ranking because they moved people. Picnic sites, hiking trails, and scenic roads received fairly high grades as well (8 out of 10).



The emerging network of off-road cycling in JNF forests

A well-known study about economics and tourism conducted over a decade ago confirmed the importance of encountering beauty and aesthetics for Israelis during their leisure time. Fleischer and Tsur (2000), economists from Hebrew University, looked at Israeli tourists' willingness to pay to visit the Huleh and Jezreel Valley. The salient question was visitors' connection to the lovely checkerboard vistas of Israel's bucolic countryside. The economists estimated the landscape value

of these agricultural lands to be \$119 a year—far in excess of the \$25 million generated by the yields in these agricultural valleys. This is particularly interesting because both valleys naturally were wetlands that were converted into agricultural areas. In other words, when Israelis leave their homes for an outing, they seek beauty, but their standards for beauty are not necessarily limited to natural sites per se but include humanly engineered landscapes. Israelis seek an alternative to their daily routine when they leave their crowded cities behind. Beauty, grandeur, and solemnity that may inspire appear to be particularly valued commodities that allow them to “refill their batteries” or literally to “re-create.”

For some time, managers in Israel's parkland agencies have recognized this critical “recreational role,” and some have shifted from an ecocentric to an anthropocentric management strategy. A list of objectives for Israel's forests appears at the opening of the recently approved policy: “The Bible of Forestry” (Osem, Brand, Tauber, Pervolotsky, & Zoref, 2014). The internal guidance defines the number one goal of forests in Israel to be “provision of recreational services, hikes and amusement in nature.” (The second is crafting a landscape, the third is providing supportive and regulatory ecosystems services, and only the fourth involves biodiversity protection.)

Although there is always room for improvement, several empirical studies suggest that Israel's forests successfully deliver cultural services for visitors. In one survey of 317 visitors at five forests across Israel, people were asked about their motivation for visiting (Sappir-Gildor et al., 2002). The major justifications expressed were a desire to enjoy nature and a need to break their routine and see a different kind of landscape. Only 45% reported hiking as a primary reason for visiting the outdoors, but 70% mentioned “enjoying” nature.

Israel's parks, especially JNF forests, tend to be stereotyped as the sites of large, tribal-like barbecues on weekends and holidays. But when asked, only 48% of visitors to Israel's forests reported picnicking and barbecuing as being their primary purpose in visiting. Most important, about 85% of people visiting Israel's forests expressed full satisfaction with them. Granted, 34% acknowledged that they felt Israel's forests were monotonous and lacking in diversity, which is less than the 41% of a control group surveyed by telephone who do not visit forests at all (Sappir-Gildor et al., 2002).

Undoubtedly, many visitors to Israel's forests like to see it as a way of connecting with the past. Because of the long history of human settlement in a modest sized area, the country is home to a profusion of historic and archaeological sites. This makes heritage a relatively significant cultural ecosystem within Israel's parks. For instance, archaeological relics have been found in many Israeli forests. Becker and Chores's (2007) 2005 questionnaire asked visitors to the Birya forest to rank their preferences for the attractions within the forest. The economists found that the ruins of an ancient fortress located in the forest was the most popular attraction (ranked by visitors far ahead of restaurants, guided tours, or activities for children). The vistas and observation points also received highest ranking, with picnic sites, hiking trails, and scenic roads receiving fairly good grades as well. Although the park's religious sites (mostly graves of venerated rabbis from the past) received lower marks; this may be because the surveys were conducted on Saturday when religious Israelis cannot travel to the forest, creating a likely bias and underestimation of these sites (Becker & Freeman, 2009).

Israelis are not attracted to all landscapes to the same degree. They have considerable nostalgia and appreciation for wild and faraway mountains and canyons,

but as the sites become more remote, the number of visitors drops precipitously. The deserts of the south hold a power and authenticity for many Israelis living in the country's crowded cities who seek a direct spiritual experience with nature during their free time. A growing number of Israelis (and many more tourists) have recognized the astonishing array of birds that live or pass through the country. Such stirring, inspirational powers are often felt to be lacking in the planted pine plantations of the JNF, which often may be far more accessible geographically. But nothing, apparently, competes for leisure time among most Israelis like the country's Mediterranean beaches.

Fleisher and Tsur (2003) conducted a survey to assess the recreational preference of Israelis based on landscape. The major categories of open spaces they

assessed were beaches, national parks, and urban parks. Using travel cost expenses as a proxy for willingness to pay, Fleisher and Tsur (2003) found that Israelis appear to value visits to the beach 10 times more than to national parks. They argued that since two thirds of Israelis live near the coast, proximity and convenience is part of the reason for the popularity of the seas. They concluded that given the popularity, Israel's beaches should "be preserved with the utmost care." Although national and urban parks constitute substitutes to some degree, Israelis prefer their beaches.

Israel's society is extremely multicultural and diverse. The myriad parks and sanctuaries, along with the natural climatic and diversity of the countryside, provide a rich menu of recreational opportunities required to meet varied and competing needs.



Beit Sheva National Park: Israel's best preserved Roman-era city





Ein Avdat National Park, arguably the most popular natural spring in the Negev Highlands region

## PRESERVING LEISURE IN ISRAEL'S PARKS, RESERVES, AND FORESTS

As Israel looks back, surely reasons exist for satisfaction and pride in developing a rich culture of outdoor recreation and communion with nature. Lands have been set aside, historic sites have been restored, and an infrastructure has been created that allows for millions of visitors to see remarkable places and not damage them during their free time. A national ethos of hiking, exploring, and celebrating flourishes that offers motivation to a nation, too often obsessed with working, to take time off and literally smell the flowers. Nonetheless, several challenges need to be faced as Israel's parks, forests, and reserves look to an uncertain future. A few of them are particularly worthy of mention.

### Financing

A debate exists across Israel's environmental movement with regard to the financing of the country's outdoor sites and activities (Goren-Windsor & Levtsiyon-Nadan, 2011). When members of Israel's Knesset originally debated the issue back in 1962, they disagreed as to whether national parks should charge entrance fees. These were still the days when Socialist visions ran deep in the heart of Israel's leaders and the Prime Minister Ben Gurion came out strongly in support of free entry to national parks. These treasures belong to the people, he explained, and citizens should not feel that they are "visitors" in their own parklands. Cordoning off these lands and demanding payment for entry was a violation of the public trust (Tal, 2002).

Yet as the network of national parks, nature reserves, and forests grew along with the associated bureaucracy, enforcement personnel, and scientific capacity required for oversight, the question of financing would not go away. For instance, just the price of picking up the trash left behind by the scores of weekend and holiday visitors for the JNF is over \$4 million every year. The National Parks Authority and Nature Reserves Authority have 1,000 employees who need to receive a salary each month.

The JNF has been lucky to receive donations and have internal resources from land leasing to pay for the foresters, the saplings, the roads, and the thousands of picnic tables and playgrounds necessary for an uplifting experience in Israel's woodlands. But picnic tables have a 10-year life expectancy and playgrounds usually do not last more than 15 years. Dirt roads that crisscross the forests and parks may easily be washed away in a powerful storm. Who will pay to maintain the existing infrastructure required to allow Israelis to enjoy these wonderful leisure-time amenities, much less expand them for the millions more Israelis (and tourists) who will surely be living in and frequenting the country over the coming decades?

The issue has been debated in the press (Sofer, 2007) and in management board rooms. Public nongovernmental organizations have sued municipalities and won for charging entrance fee to non-residents (Rinat, 2007). At present, two polar opposite positions have emerged.

Entrance fees have become a critical part of the National Parks and Nature Reserves annual budget. Although the government provides roughly 150 million shekels each year, that is only one third of the 450 million shekels that it costs to run the expansive system of parks and reserves. The difference is made up by entrance fees and, to a lesser extent, con-

cessions (Israel Ministry of Economics, , 2013). An elaborate table of price tags to different sites is available online, which includes discounts for senior citizens and students as well as daily, weekly, biweekly, and annual passes. The price is not prohibitive. A family of four typically pays between 60 and 80 shekels (\$20 to \$30) to visit one of the 77 national parks or reserves that have begun to charge an entry fee. But to spend time in one of the more popular sites, such as the archaeological parks of Caesarea and Beit Shean or the springs and swimming holes at Hurshat Tal and Sakhnah, may cost closer to 130 shekels. (A yearly pass can be bought for \$40 per person.) And what if a family has eight children and lives below the poverty level like so many large Israeli families do?

On a good year, over 700,000 people visit Masada and Caesarea (Timor, 2009). The fees and associated concessions may help fund other sites that are costly to run but do not have the same commercial appeal. Yet, many feel that the entrance fee is insulting. On the vaunted Israel Trail, which allows people to walk the entire length of the country over a 2-month period, young hikers, just out of the army, frequently will have to circumvent the most unique sites along the route because they cannot afford to pay to see them. This seems wrong.

Despite pressure from its staff, the Board of Directors at the JNF has taken the opposite position and refuses to charge the public to access its forests. This creates a virtuous feeling, at least in the short term. Nonetheless, land management expenses continue to pile up. Recently, the organization set up a new department to pursue entrepreneurial ventures inside the forests that will help defer operational expenses. Perhaps restaurants and weddings should be allowed in the entrance to JNF parks. But what about gas stations and cellular phone antennas? The

economic temptations are great, as is the price that will be paid in the quality of visits if inappropriate decisions about commercializing the forests are made.

Ultimately, the Israeli government has to recognize that no less important than providing roads and education is preserving the landscape, historic venues, and open spaces with which it is entrusted. It needs to encourage citizens and tourists to see these wonders up close. Countries such as New Zealand have passed statutes stipulating that their national parks remain free to all comers. Other countries such as Jordan and Belize charge foreign visitors 5 to 10 times more for entry into parks than domestic users in recognition of the rights of their denizens. Other countries such as the United States allow free entry to national parks for people with disabilities and give the elderly highly reduced rates. A pricing system must reflect the values of a society as well as the economic realities of supporting an extensive outdoor infrastructure.

A gap in accessing the parks and forests has been documented for some time

among Israel's citizens: Wealthier citizens can afford the travel and costs of visits to national parks and poorer citizens often cannot. As part of guaranteeing equal opportunity and basic amenities to Israel's public, the government should allocate much of the \$80 million in funds that it now receives from citizens. It can decide to charge international visitors more, as presumably they can more readily budget entry fees into their travel expenses. Ben Gurion's vision of open spaces remaining open to the public that owns them should be renewed and translated into public policy.

### Ensuring Quality Visits

Israel's parks, nature reserves, and forests need to offer leisure experiences. Education should be available; people should be able to come to parks and learn from engaging lectures, from charismatic guides, from clear signs, and from brochures (in many languages). Fun is also important. In designated areas that are not sensitive ecologically, visitors should be able to park their cars, enjoy



A new accessible playground as part of a national initiative to open the country's parks to all citizens

shade, cavort and party with family and friends, grill meals, sing, dance, and go to the bathroom in a proper, clean toilet. This requires building and maintenance. Alternative areas should be designated as hiking and biking trails, which also need to be maintained. And, of course, most of the protected lands should be left to the creatures, with whom humans share the country, that are increasingly disappearing due to habitat loss (Organisation for Economic Co-operation and Development, 2011).

Visitor centers at national parks are beginning to become part of Israel's leisure experience, and this is good. The first such center was built in Mitzpe Ramon during the 1980s, and it was soon followed by others. The centers are increasingly sophisticated with specially produced films, sound and light shows, and interactive museums. For example, as a final station at the newly improved visitor center at the Huleh wetland reserve, sightseers of all ages participate in an interactive and highly entertaining competition, using electronic scoring, to see whether they remember the key messages and information conveyed as they walked through a fascinating museum. Many see the Masada visitor center, with its compelling movie and artifacts, as the "jewel in the crown." (Indeed, the original Mitzpe Ramon center became old-fashioned and is presently undergoing a makeover and will be reintroduced as a museum of outer space.)

Visitor centers may be money-making ventures for the Nature Reserves Authority, National Parks Authority, and the JNF. But even more important, they allow visitors to better appreciate the extraordinary sites they are about to see. Although they are no substitute for visiting the actual places, centers may also diffuse the growing pressures on the natural and historic sites themselves and offer an opportunity for concession revenues.



An ibex at the top of Mitzpe Ramon

Cycling constitutes a major challenge for the future of parks. Absent precise official figures from Israel's Central Bureau of Statistics, the actual number of recreational cyclists in the country may only be estimated. With 300,000 bicycles imported annually, generally it is assumed that 1 million Israelis enjoy cycling as part of their leisure portfolio. The rising number of cyclist injuries and fatalities on the highway has highlighted the need for an off-road infrastructure that will allow the growing number of recreational cyclists to ride without fear. Yet, Israeli cyclists share many of their trails with hikers, who may be intimidated or injured by the growing number of bicycles whizzing by. Creating parallel infrastructure will be expensive, but it is inevitable in many of the more crowded parks and forests.

The National Parks Authority and Nature Reserves Authority have initiated an unofficial and de facto policy of triage in managing the burgeoning crowds



The “mushroom” at the geological and archaeological wonderland in the Timna regional park

that keep coming. Certain extremely popular sites are heavily visited. Rather than discouraging this phenomenon, it is encouraged. Tens of thousands of school children each year are directed to reserves such as Ein Avdat or Nahal David at Ein Gedi, lovely desert waterfalls in the Negev with scenic walks through canyons and hills. What seem like fairly isolated oases inhabited primarily by ibex are transformed into teeming thoroughfares on many days. At the same time, other more remote waterfalls and water holes in the vicinity are more difficult to access and are left undeveloped, without fences or entrance fees.

Given the anticipated growth in the size of the population and the increasing amount of leisure available for visits, such a policy makes sense and needs to be expanded. For many years, nature advocates have complained that natural sites that are the most pristine may be ruined by automotive infrastructure. They have argued that most of these places should only be accessible by foot (Abbey, 1968). Israel needs to find ways to ensure that the hermits and hikers who wish to find

quiet and solitude during their leisure hours are able to do so. And, of course, the animals and plants also need respite from humans.

### Preserving Israel's Natural Heritage

Israel is a crowded country. Having grown from 1 million to 8 million people in 65 years, the pressure on the open spaces continues to mount (Tal, 2008). The country has made a bold and farsighted decision to designate over 35% of its lands as protected sanctuaries that preserve the country's exceptional natural and cultural history. As people have more free time, they now have hundreds of places to visit to enjoy what this small but unique country has to offer. But the existence of these experiences is not guaranteed for the next generation.

The profits to be made from development that would erode the quantity of Israel's protected lands (and the quality of people's visits) are enormous. Only an active, vigilant, and ongoing campaign, run by a robust and independent civil society, will maintain the public support necessary to protect these publicly owned



Children visiting the Gilboa Nature Reserve to celebrate the annual appearance of the endemic Iris blossoms

treasures. In this never-ending battle, Israel's parks and nature reserves need to be drafted to "save themselves." Parks can and should be designed to spread a message of preservation, describing any

existing threats to their continued operation and galvanizing visitors through petitions, demonstrations, concerts in nature, and other activities to take part in these efforts.

Complacency sets in after parks, reserves, and forests are declared. The sense is that once it is official, a conservation achievement is "set in stone" and will also constitute an option for peoples' future leisure. This is not the case. The persistence of Israel's impressive network of sanctuaries in its present form and dimensions is not guaranteed. In a democracy, it is easy to rezone and replace open spaces with residential, commercial, or industrial development. When established in the 1950s and 1960s, the Jerusalem forest sprawled over 400 hectares of land. Today, only 100 hectares survive (Tal, 2013). When Israelis and those visiting from abroad come to the countryside to celebrate the astonishing mosaic of culture and nature packed into such a tiny state, they need to be mobilized. Translating the edifying experience of Israel's cultural and natural heritage into a commitment for preservation will be essential if future generations are also to enjoy the outstanding outdoor leisure opportunities available today.

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