

Nature without barriers

The Lotem organization is transforming outdoor experiences for people with disabilities

• JUDY SIEGEL-ITZKOVICH

With this country increasingly being covered by apartment towers and concrete, it's natural for Israelis to crave green spaces, dip their feet in a gushing waterfall, search for animals, and breathe clean air. They can just get into a car, bus, or train with a picnic basket, suntan lotion, and a hat. But such an expedition is a rarity, or sometimes impossible, for physically and emotionally disabled children or adults.

The nature trails have to be passable for those in a wheelchair; the deaf need sign-language translators to explain what is said; the blind want to touch their surroundings; food has to be ground up for those who have difficulty chewing; restaurants and toilet facilities must be accessible.

This has always been impossible for the large and growing numbers of people with physical and cognitive challenges around the country – at least until the establishment in 1991 of Lotem (Making Nature Accessible), founded and directed today by Amos Ziv. The Hebrew word means “a bush of golden flowers” and refers to a genus of delicate, fragrant flowering shrubs.

Born in Yokne'am in the lower Galilee, Ziv studied at the Ruppin Academic College in the Hefer Valley and planned to take people on tours of the country. On a visit to the Jerusalem Institute for the Blind, he met people most of whom were visually impaired people and not completely blind.

“I’m good at organizing things, so I thought I could arrange trips in nature in various parts of the country that were accessible and be meaningful for them. Nobody was doing this 30 years ago,” he said in an interview.

“Everyone deserves to experience nature. It’s a necessity, not a luxury. Israelis have been cooped up during the COVID-19 pandemic, and then the missile and drone attacks from Gaza, Lebanon, Yemen, and elsewhere. They locked themselves in shelters and safe rooms. But they have to have space. But going on a trek to nature areas is not simple for the disabled. It’s not a luxury but a necessity,” he insisted.

The organization promotes empowerment for people of all ages who have disabilities through its nature experiences, trips, workshops, and diverse activity groups. Operating nationwide, it has offices in Yokne'am, Jerusalem, and Beersheba. Activities combine educational, community, and experiential work, while also personalizing the physical, emotional, and cognitive needs of each participant through guided programs in nature.

During times of crisis, teams operate in over 25 locations nationwide, including hotels and kibbutzim hosting evacuees, and serve over 100,000 people annually with physical, cognitive, emotional, and sensory disabilities.

Its nature-based retreats support survivors of trauma and terrorism, as well as soldiers suffering from post-traumatic stress disorder. Their “Integra-Teva” program brings together diverse groups, including Jews and Arabs, to learn ancient agricultural techniques. It also operates an in-service training center to teach professionals from the government, as well as the private sector how to better integrate people with special needs into society.

Lotem’s trips take place in small groups, who are accompanied by trained guides with experience



NATURE VISIT with Ilan organization families. (Inbal Ben Meir)

working with a variety of disabilities. It’s 60 workers include paid employees as well as volunteers, which include young women fulfilling their national service. Everyone is trained in small groups to be more effective, even though it’s more expensive.

BEING IN nature provides profound physical and mental health benefits for people with disabilities, pri-

marily by reducing stress, alleviating sensory overload, and encouraging gentle physical activity. Accessible outdoor spaces offer an inclusive environment that boosts mood and cognitive function.

The benefits include stress reduction by decreasing cortisol levels. The gentle, unpredictable stimuli of nature (soft breezes, rustling leaves, flowing water) calm the nervous system, which is highly beneficial



TREK AT the Hashofet Stream. (Chet Stein)

for individuals with sensory processing sensitivities or neurodivergence.

Outdoor recreation, such as paved nature trails, adaptive cycling, or kayaking, promotes cardiovascular health, strength, and mobility in an inclusive format. Natural settings require “soft fascination,” allowing the brain to recover from the mental fatigue and over-stimulation of daily life, and exposure to sunlight increases endorphins and serotonin that combat depression and improve overall well being.

“Beyond the sense of capability and equality that our travelers gain, the trips emphasize empowerment, development of life skills, promotion of motor skills, and familiarization with basic concepts in nature, alongside education for tolerance and acceptance of differences,” Ziv noted.

With assistance from Keren Kayemeth LeIsrael-Jewish National Fund, the organization created a 1.5 km. trail at the Hashofet Stream near Yokne’am, which is surrounded by a towering forest. The path alongside the stream is stroller- and wheelchair friendly. There’s an old flour mill to explore, a bridge to cross, a waterfall, wood benches, and picnic tables. Sometimes, even cows pass by. A million people – more than at Masada – trek there every year.

Lotem’s Valley of Peace park is located in the Menashe Heights just outside of Yokne’am Illit. It is a 40-acre nature reserve and historic ecological farm famous for its wheelchair-accessible education center. Children with disabilities can press grapes with their feet, crush olives to make oil, all the while appreciating and connecting with nature. And everyone can be stimulated by light, touch, sight, and sound, regardless of ability.

The organization also runs school trips for people with special needs. “We have a large team of tour guides who have been trained to work with people with all types of special needs, and we cover all kinds of functional levels,” said Ziv.

“Older people want to be treated like adults, but people they meet often speak to them as if they were children or even just to the person accompanying them. In nature, these insults disappear, thanks to our guides who are specially trained,” Lotem’s director said.

Some 65% of all schools, including special-education frameworks, as well as pupils at Jerusalem’s Alyn Rehabilitation Center for Children and Youth, Ilan, Shalva, Akim, and adults with disabilities, participate throughout the year. Special groups, including organizations for children at risk and women in battered women’s shelters, are invited to take part, Ziv added.

The chairman of Lotem’s board is Sorin Hershko, 70, an Israeli hero and paratrooper who served on the assault team during the 1976 Operation Entebbe hostage rescue mission. He was severely wounded during the raid, sustaining a spinal injury that left him permanently paralyzed from the neck down.

RECALLING ONE memorable participant on a trek, Ziv cites Raz, who was eight years old when he was seriously injured in a road accident. “He was connected to an oxygen tank, in a wheelchair, and able to move only one hand. He lived in the Alyn Orthopedic Hospital and Rehabilitation Center for two years.

At 18, he wanted to do national service and he joined Lotem and taught himself English. Now in his 30s, he



LOTEM TEAM: Amos Ziv (top), director-general, and Einav Blum, deputy director-general. (Photos: Lotem)

took the Tourism Ministry official guide’s course and was licensed. Always optimistic, he tells people he takes on tours of his experiences: “Nature does not judge you. You can be whoever you are and whatever you want. That is why Lotem is so important!”

“We work a lot with soldiers who were physically injured and suffer from post-trauma, working with their family, horses, and specially-trained dogs,” added Einav Blum, Lotem’s deputy director-general for education and an occupational therapist. She was inspired to join the organization because both her brother and a sister are disabled, physically and cognitively.

“One father told our team that his child was a



BEIT MIRIAM, activities with dogs. (Ronit Cohen)

different person after participating in our activities. There are kids who refused to speak, but during the trek, they said some words. One girl who suffered from anorexia was hospitalized in Jerusalem but was unwilling to cooperate with the doctors and nurses. We ran a nature club there, bringing leaves and little animals for her to see. She said that she waited all week with anticipation for the team to come, and she was finally discharged in better health.

"We talk about the level of accessibility at each site. Many meet the legal standards but are difficult for the disabled to reach," Blum added. "They aren't used to the quiet in nature where they can breathe deeply. We want to help them relish and look forward to it. Being among trees, plants, and open skies isn't just fun; it's essential for our mental health support. Those moments of peace help calm our racing thoughts. And when we're feeling down or anxious, a simple walk in nature can lift our spirits."

Being surrounded by nature is beneficial. A 2015 study published in the *Proceedings of the National Academy of Sciences* found that people who walked for 90 minutes in a natural environment, compared to those who walked in a high-traffic urban setting, showed reduced activity in a brain region linked to a major factor in depression.

Another study in 2017 examined the impact of nature access for people with mobility disabilities; Parkinson's disease patients improved their mobility more significantly when engaging in activities in nature compared to non-nature environments. They also saw other health benefits, such as better cardio-respiratory capacity, and lower and more stable blood pressure and heart rate. These improvements often appeared right after the activity and lasted into their daily lives.

Researchers think the long-term benefits may come from being more physically active or increased self-confidence and motivation after exercising in challenging mountain environments.

"We work with the Nature and Park Authority, the Antiquities Authority, and others, but there is a lot of bureaucracy. Some organizations set up one accessible picnic table, claiming they don't have enough budget.



PEACE VALLEY activity. (Chet Stein)

Some authorities are just lazy," Ziv suggested.

SINCE OCT. 7, the organization has seen a dramatic increase in demand for its service because there is a lot more emotional distress, said Blum. "If we had unlimited funds, we would like to help more groups and offer even higher-quality activities."

Lotem's annual budget is about NIS 10 million. Israeli banks, for example, donate very little. The low dollar-shekel exchange rate has hurt the organization, since most of its contributions are in dollars from donors from abroad, yet the organization has to convert the money and pay its bills in shekels. Currently, it is short NIS 800,000. Participants pay only a small amount for the excursions.

'Everyone deserves to experience nature. It's a necessity, not a luxury'

"We try to encourage organizations, businesses, and individuals to 'adopt' a disabled child or an activity," said Ziv. "We want them to be partners, not just to donate money."

Among the projects donors can support is the Mother Nature Program, a safe and restorative day-long experience outdoors for mothers and their children who are victims of domestic violence. It includes hiking, cooking, and art workshops that help promote trust and self confidence; a weekly nature club in schools for those who can't leave their indoor environments on a regular basis to come closer to nature in a fun, creative, and informal learning environment; and class field trips.

Lotem was involved with the kibbutzim and moshavim on the Gaza border before the devastating Hamas-led terror onslaught of Oct. 7. Immediately after that, the organization sent teams to evacuees in hotels and kibbutz guest houses, taking them on nature trips and vacations to help calm them, Ziv recalled.

The most logistically complicated trip it ever ran was one that involved older women, over several days, who were pushed around in their wheelchairs and who required liquified food, toilets at the right height, moving beds, sign-language translators, and help for the blind.

For Jacob Milstein, a fifth-generation farmer from

Kibbutz Merhavim in the North, his connection with Lotem was actually lifesaving. He was looking for work outside the farm, and he saw an ad looking for a maintenance manager at the non-profit organization's Emek Hashalom farm. He wanted to work in an open space, accessible to all, close to nature, and with a connection to the therapeutic field.

On Tu B'Shvat, after a long day full of visitors at the Emek Hashalom farm, Milstein returned home from another fulfilling day at work, ready to sit on his terrace with a cup of coffee and enjoy the beautiful sunset.

"I suddenly felt something strange: I wanted to go straight, but my body went to the right side. I also began to feel restless, as if I was uncomfortable anywhere I turned."

An ambulance took him to the hospital, where he had a CT scan. The doctor then told him: "Mr. Milstein, you are having a stroke."

"I didn't notice that my hand and leg were already paralyzed, but when I tried to get out of bed, I fell to the floor, paralyzed in half of my body. I became depressed. One day at the hospital, Amos Ziv came to visit. After 10 minutes, he said: 'Jacob, your job with us is reserved for you. When you recover, you will come back to us, and together we will find the right place for you.'

"After a long rehabilitation process, I felt I was on the road to recovery. Slowly, from the wheelchair I moved to the treadmill, and from there to a cane," Milstein recalled. "At first, I gave lectures at Lotem as a volunteer, but after a while, the director of Lotem's accessibility department asked if I wanted to be a Lotem staff member. It was one of the most moving sentences I have ever heard in my life."

He went back to work as an instructor, and his physical, mental, and cognitive abilities improved greatly. "With all the love I had for people with special needs, and my willingness to help them, I still consider my life experience today of a person with special needs. Even when I forget about it, life reminds me.

"I know what people with special needs go through. I'm more aware of when they need help. I've discovered something new that I am good at, which is an amazing feeling," he reflected. "My thanks to Lotem, this amazing place, this special team, and the people of JNF-USA who support Lotem and allow this special miracle to exist in the world and illuminate the world in a better light."

For more information about Lotem, visit movingforwardlotem.com/lotem.