

A New Era for Israeli Conservation

Start-Up Nature: 2025 Impact Report

Introducing **Start-Up Nature**



Dear Friends,

A century ago, Israel's wetlands stretched across 50,000 acres, providing critical stopover sites for hundreds of millions of migrating birds on the Africa-Eurasia flyway, and supporting rich, diverse ecosystems. But by the end of the 20th century, 95% of these wetlands had been drained in an attempt to combat malaria and make way for agriculture and development. Once-thriving habitats disappeared, throwing off the balance of nature.

For decades, conservation efforts focused on protecting what little remained. But in 2018, **Start-Up Nature** was born from a bold idea: **not just to preserve but to restore** Israel's lost wetlands. SPNI, founded in the 1950s to prevent the draining of the Hula wetlands, took on an even bigger challenge — rewilding thousands of acres of lost wetlands.

We saw a rare opportunity. As kibbutzim were changing their fish-farming methods to adapt to changing economic conditions, artificial fish ponds — many built on the remains of rich wetlands — were at risk of being permanently drained, putting in doubt the future of these substitute stop-over sites. We acted quickly, leasing and restoring these lands before developers could act.

Today, our flagship sites at Kfar Ruppin, Maagan Michael, and Eilat are thriving, buzzing with birds, mammals, and insects, ensuring Israel can continue its critical role in supporting ecosystems across Africa, Europe, and Asia.

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And now, this success has inspired a movement. With eleven new projects in motion, we are on track to achieve 25% of the country's long-term conservation goals by restoring **over 3,000 additional acres by 2030**. Through smart water management, habitat design, and community involvement, we are proving that rewilding is not just possible, it is revolutionizing Israeli conservation.

Your support has made this possible. Thanks to you, nature is returning, birds have a safe haven, and a more sustainable future is being realized.

We are deeply grateful to have you with us on this journey. Together, we are proving that whether months or centuries have passed, reviving Israel's historic landscapes is a dream worth pursuing.

With gratitude,

Dan Alon

CEO, Society for the Protection of Nature in Israel

A handwritten signature in black ink, appearing to read 'Dan Alon'.



Israel is located at a bottleneck in the Africa-Eurasia migration flyway, playing a critical role in supporting ecosystems across Africa, Europe, and Asia.

Kfar Ruppin: A Living Laboratory

Once a network of commercial fishponds, Kibbutz Kfar Ruppin is now a thriving wetland ecosystem and a showcase for the power of rewilding.

The Kfar Ruppin project supports the restoration of the Jordan River, and the wetlands along its banks, in a growing corridor in the Beit Shean valley. Utilizing natural filtration processes, purified water from our wetlands, formerly diverted to agriculture, is returned to nature to strengthen this iconic waterway.

Since restoration work began in 2020, the populations of indigenous plants, birds, invertebrates, reptiles, and mammals have all soared, indicating the success of our restoration efforts. Careful water management creates ideal conditions for endangered species, including rare ferruginous and marbled ducks, to nest and safely raise their young.

How we rewilded 105 acres on the banks of the Jordan River:



Today, this site not only supports rich biodiversity but also serves as a vital research hub for tracking the impact of ecological restoration.

Cutting-Edge Monitoring and Research

Our research at Kfar Ruppín focuses on three key groups of creatures: birds, bats, and Odonata — dragonflies and damselflies. The progress of these three categories provides insights into the well-being of the ecosystem as a whole.

Researchers and volunteers use point counts, bird banding, and acoustic monitoring to track population trends. Our point counts cover various micro-habitats throughout the site and are supplemented by contributions from visiting birders. This has even allowed us to track ducks during the breeding season when they're notoriously secretive.

To further support this work, we have installed bird hides, observation platforms, and acoustic bat detectors, making Kfar Ruppín one of the best-equipped sites for wetland research in Israel.

Despite challenges such as security restrictions near the border, these ongoing monitoring efforts have provided invaluable data to refine our conservation strategies.

Impact at a Glance

In 2024, over 200 bird species have been recorded at Kfar Ruppín and many endangered species successfully bred.

105 acres rewilded

16 species of Odonata

1.75 million m³ of water returned to nature this year

9 bat species detected

63 threatened bird species sighted

55 acres adjacent to the site leased for expansion

Maagan Michael: Connecting with Nature

Maagan Michael Bird Sanctuary and Rewilded Wetlands has become a haven for both birds and people. The site was officially opened this year by Haim Katz, Israel's Minister of Tourism.

Making Nature Accessible to All

Visitors benefit from newly developed infrastructure, including observation points, educational displays, and family-friendly walking paths. These allow Maagan Michael to host a range of visitor programs:

Beit Canada Education Center

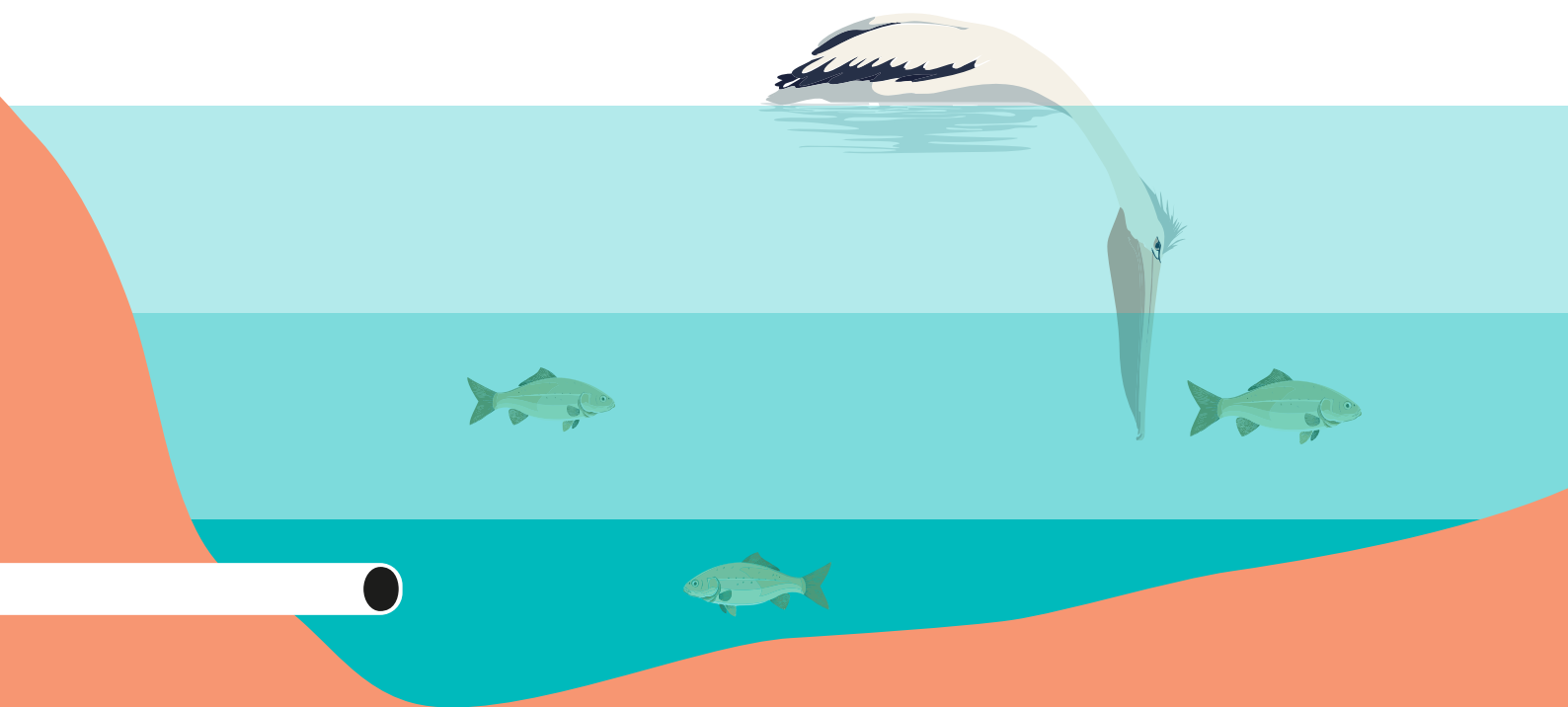
Israel's first educational site focused on rewilding and biodiversity conservation, hosting school visits, guided tours, and citizen science programs.

Nature Heals Eco-Therapy

SPNI's eco-therapy program provides respite and relief to thousands of Israelis suffering from post-traumatic stress by helping them connect to the natural world.

Community Engagement

Local volunteers, researchers, and visitors are actively involved in conservation efforts, including bird monitoring.



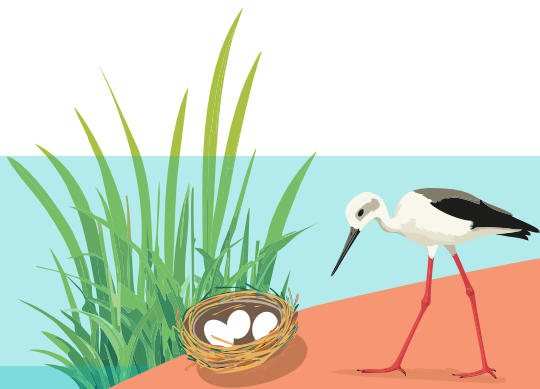
Water levels throughout the site can be managed to mimic natural changes using pumps and sluice gates. Changing water levels create optimal conditions for resident and migrating species throughout the year, ensuring a dynamic and sustainable ecosystem.

Winter — The winter rains and natural run-off replenish water levels. Fishing birds like great white pelicans chase their prey from the deeper water into the shallows, where the fish are easily caught.

Professionals and the Birding Community Come Together for Conservation

Monitoring the thousands of birds that migrate through Maagan Michael is a team effort. A dedicated team of local volunteers conducts regular bird banding while SPNI's professional staff gathers data by carrying out bird counts at four set points at the site, each representing a distinct type of habitat.

Thanks to careful habitat restoration and water management, **226 species were spotted** in the bird sanctuary in 2024, **47 of them threatened**, and **42 species are breeding**.



Spring — As the rainy season ends, a balance is reached between incoming flow from seasonal rivers and the rate of evaporation. This creates stable conditions for birds such as black-winged stilts to build nests in vegetation by the water's edge where they're protected from jackals and other predators.

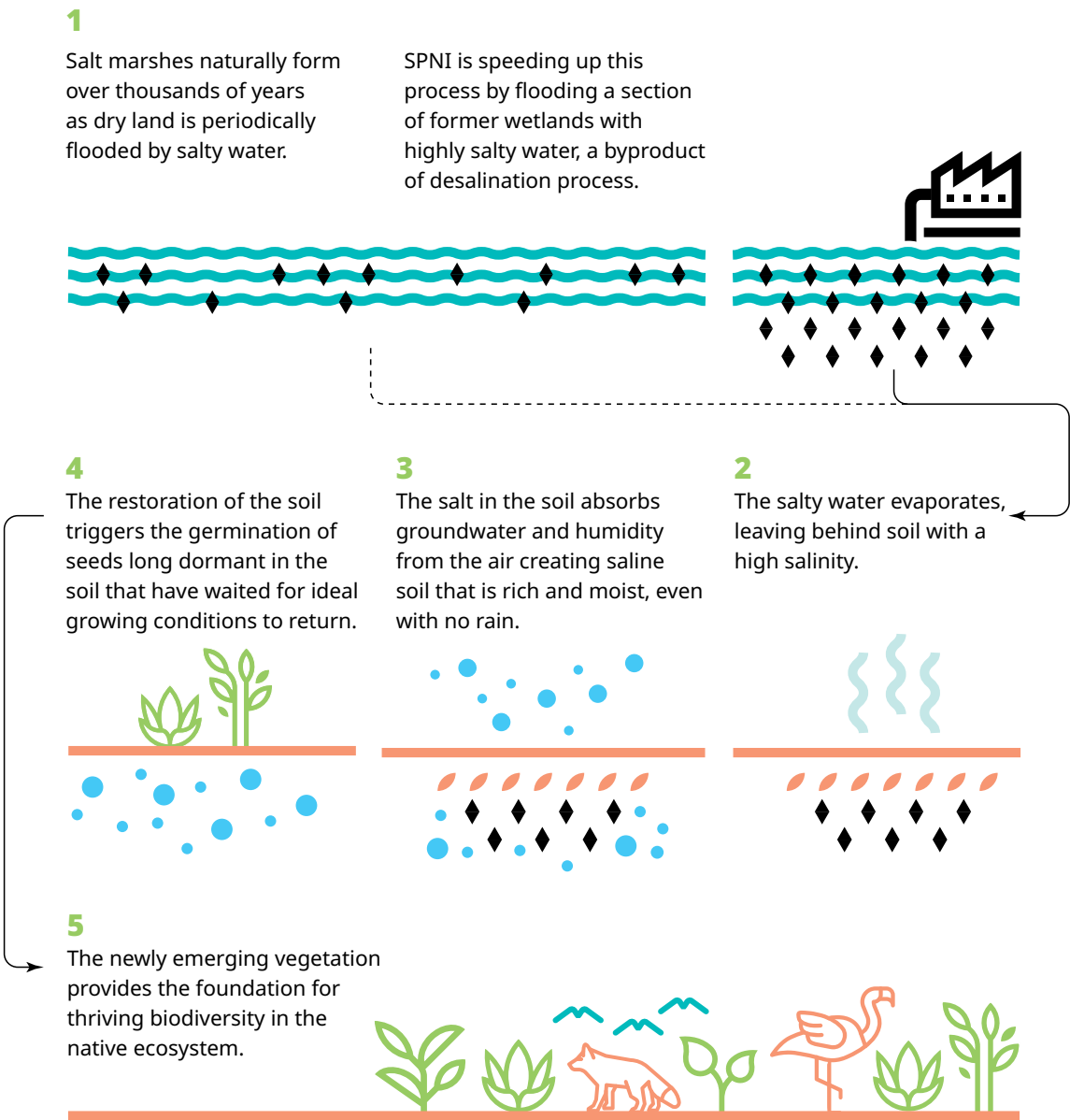
Summer-Fall — During Israel's hot summers, water in the pools evaporates rapidly. The receding water levels give shrubs and trees, like the tamarisk, room to spread out during their flowering season. Plants that germinate under the water can emerge, creating the ideal conditions for other species to build their nests. As the water levels continue to fall, the muddy bottom of our wetlands is exposed. These mudflats, rich with insects and invertebrates, are revealed just in time to nourish sandpipers and other small waders that are migrating south for the winter.

Eilat Salt Marsh

Accelerating Natural Processes to Restore Eilat's Historic Salt Marsh

Eilat's Salt Marsh, a historic stopover for migratory birds, is making a comeback. Located at the edge of the Sahara desert, Eilat is the most important of Israel's stopover sites, but the salt marsh at the heart of this ecosystem were nearly lost due to urban development.

Now, a groundbreaking restoration project is bringing it back. SPNI, in collaboration with many local partners, has accelerated natural processes to rejuvenate 25 acres of salt marsh within our International Bird and Research Center Eilat and an area adjacent to it.



This rewilding effort has had positive impacts for the entire region:



Migratory Lifeline

A critical rest stop at the edge of the Sahara Desert.



Biodiversity Boom

Restored habitat supports rare salt marsh plants and animals, with a resurgence of bird species such as the once-vanished, critically endangered Nubian nightjar.



Sustainable Water Use

Redirecting salty wastewater from the desalination plant reduces the amount of nitrogen pollution reaching the fragile Red Sea coral reefs.



Carbon Capture

The restored vegetation absorbs CO₂ and improves air quality in an arid region with few trees.



Educational & Community Hub

Free, 24/7 access with guided tours and engagement programs, with one-third of visitors joining guided experiences.



Wartime Refuge

Provided sanctuary, emotional respite, and psychological relief for 60,000 displaced refugees in the year after October 7th, 2023.

Victories of Rewilding

by the numbers

Bird species seen

226 at Kfar Ruppín

214 at Maagan Michael

350 at the Eilat Salt Marsh

Rare species spotted

63 at Kfar Ruppín

47 at Maagan Michael

15 at the Eilat Salt Marsh

Species now breeding

39 at Kfar Ruppín

42 at Maagan Michael

45 at the Eilat Salt Marsh

Community involvement

152,000 total human visitors

2,100 total meters of new trails

\$700K of clean water offsets sold to Google and Microsoft

Wild Wonders Within the Data



Nile Wisp

The Nile wisp was considered extinct in Israel until recently. A healthy population has been discovered at Kfar Ruppin, attracting many nature lovers.



Monoecious Seablite

Once nearly lost in Israel, this endangered salt marsh plant has naturally re-emerged in our rewilded salt marsh in Eilat.



Booted Warbler

In August 2023, a booted warbler was recorded at Maagan Michael — only the fifth sighting of this central Asian breeding species in Israel.



Eurasian Otters

In summer of 2024, researchers found signs of otters along the Jordan River north of our Kfar Ruppin site. Their presence would be the ultimate sign of success.



Western Yellow Wagtail

In June 2024, two western yellow wagtail families — among the few known nesting pairs in Israel — were found breeding in Kfar Ruppin's Safa Reservoir.



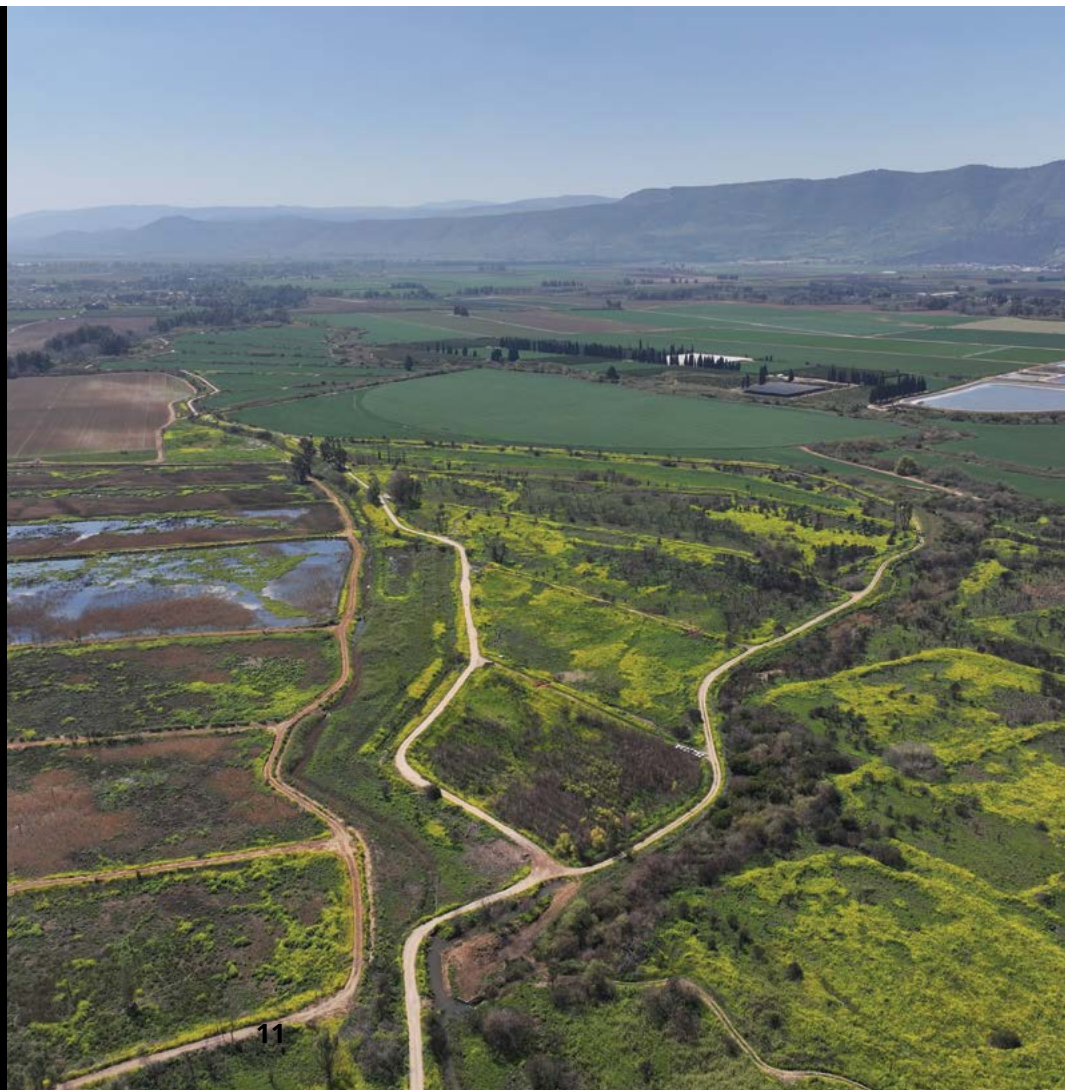
Rare Waterfowl

Water levels in Kfar Ruppin's Amud Reservoir are designed for threatened ferruginous and marbled ducks, both of which bred there in 2023 and possibly 2024.

An Inspiring New Project at Kibbutz Dan and Kibbutz Dafna

These accomplishments are driving continued expansion. Research and educational programs are ongoing at all three flagship sites and a fourth project has been initiated in Kibbutzim Dan and Dafna, a few kilometers from Israel's border with Lebanon. The first stage of the rewilding project has commenced with natural water sources redirected to flow again into these pools for the first time in years.

An aerial view of the Kibbutzim Dan and Dafna rewilding project.
Credit: Yuval Dax



The Next Chapter for Israeli Rewilding

SPNI's flagship sites proved it—rewilding works. Now, the Ministry of Environmental Protection and organizations across Israel are embracing this game-changing approach. SPNI is advising, partnering, and helping secure funding to support reviving ecosystems from north to south.

This is rewilding at scale.

Kabara
1,500 acres
Project start: 2023
Primary partners:
Kibbutz Maagan Michael, Carmel Coast Drainage Authority

Maayan Tzvi
200 acres
Project start: 2022
Primary partners:
Kibbutz Maayan Tzvi, Nature and Parks Authority

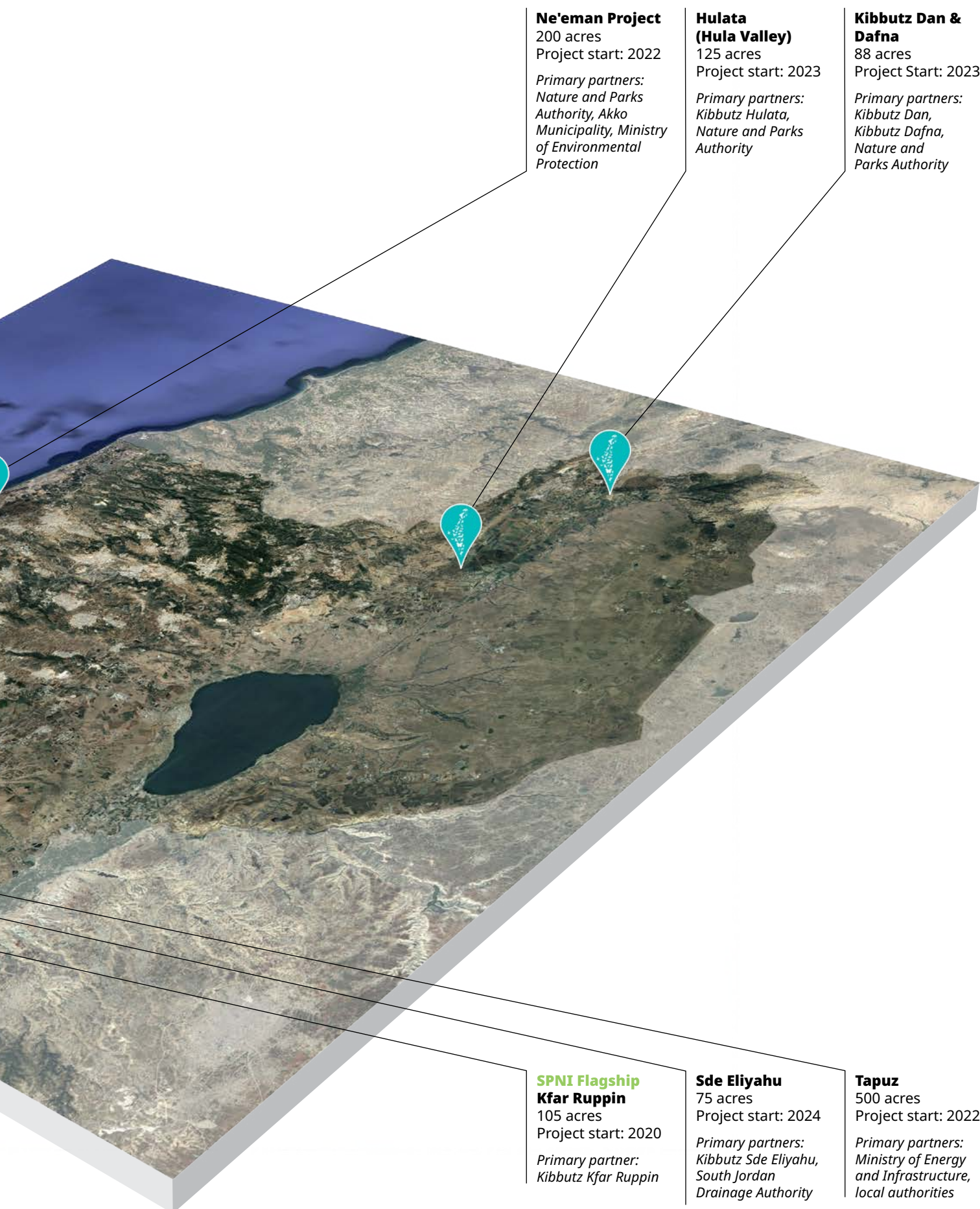
Difla Restoration Project
50 acres
Project start: 2024
Primary Partners:
Kibbutz Difla, Nature and Parks Authority

Afek Ponds
150 acres
Project start: 2022
Primary partner:
Nature and Parks Authority

SPNI Flagship Maagan Michael
20 acres
Project start: 2021
Primary partner:
Kibbutz Maagan Michael

Kibbutz Hamaapil
50 acres
Project Start: 2024
Primary partners:
Kibbutz Hamaapil, Nature and Parks Authority

Ein Saharon
140 acres
Project start: 2025
Primary partners:
Kibbutz Kfar Ruppin, South Jordan Drainage Authority



Projects on the Horizon

Rewilding the Kabara

Once the second-largest wetland in Israel, the Kabara swamp was drained for agriculture in the 1920s. However, the land proved unproductive, difficult to farm, and prone to winter flooding. Inspired by our flagship projects, a coalition of public, private, and philanthropic organizations has joined SPNI to restore this ecologically important area.

A New Era of Conservation

Plans are in motion to restore 1,500 acres of former wetlands. As Israel's most ambitious rewilding project to date, the Kabara requires a new model of land management to ensure long-term protection. The Israel Nature and Parks Authority, Kibbutz Maagan Michael, the Carmel Coast Drainage Authority, and major philanthropic partners are working together to navigate land use, infrastructure, and conservation needs.

Accessible, Protected, and Thriving

Located between Haifa and Tel Aviv, the Kabara is ideally located to become a nationally adored ecological treasure. With a train station nearby, visitors will soon be able to step off and explore a rewilded landscape teeming with life. Plans include visitor facilities and partnerships with nearby attractions like Ramat HaNadiv and Zichron Yaakov, creating a dynamic nature destination.

With NIS 1.5 million already allocated for planning, the vision for Kabara is becoming a reality. Once complete, it will not only restore lost habitats but also create an easily accessible outdoor experience in the heart of Israel.



The Kabara
reimagined

The Collaborative Tapuz Project

As fish farms in the Beit Shean Valley shut down, they present a prime opportunity for solar power development. However, birds from around the world relied on those fishponds, and the wetlands they replaced, as critical migration fueling stations. The Tapuz Project brings together an unprecedented coalition of government ministries, local municipalities, and leading philanthropic organizations to ensure that wildlife thrives, clean energy increases, and local communities prosper.

A Cooperative Model for Sustainability

This initiative unites the Ministries of Energy and Infrastructure, Agriculture, and Finance with 22 local townships to reimagine 1,500 acres of former fish farms. One-third of the area, 500 acres—defined as the most

ecologically significant—will be rewilded, restoring vital habitats along the Africa-Eurasian migratory flyway. The remaining area will house solar panels generating 500 MW of renewable energy, a crucial step in Israel's sustainable energy development.

Government-Funded, Community-Driven

With NIS 1.2 million (\$280,000) allocated for planning and over NIS 100 million in projected annual revenue, this project proves that conservation and economic growth can go hand in hand. Tapuz is setting a new standard for sustainable land use, demonstrating that Israel can protect biodiversity while investing in a cleaner, greener future.



Migrating great white pelicans stopping at a fish farm in the Beit Shean Valley. Credit: Thomas Krumenacker

Nature Heals

Imagining a Sustainable Future for the Gaza Envelope

Every winter, the landscapes of the western Negev come alive with breathtaking wildflower blooms, drawing visitors from across the country. But the October 7th attacks and conflict that followed have devastated these areas in the Gaza Envelope. Fires raged, rockets fell, and heavy military infrastructure disrupted fragile ecosystems.

Now, SPNI is playing a leading role in the national efforts to heal these spaces, applying successful rewilding and rehabilitation models to restore nature and support local communities and local eco-tourism.

The Scars of War

The damage extends beyond burned fields and displaced wildlife. Military vehicles and heavy equipment have physically altered the land, changing how rivers flow, impacting erosion, and affecting the depth of waterways. Compacted soil has disturbed the insect populations that turn over the soil, which in turn affects plant growth and water absorption.

The ecological balance has shifted as some animals left the area during the conflict and invasive species moved in. Nocturnal birds had their daily cycles disrupted by constant artificial lighting, and packs of feral dogs are roaming in significant numbers, hunting and wreaking havoc on local livestock and wildlife.

A Vision for Renewal

SPNI is working to reverse these effects, ensuring ecosystems recover and thrive once more. As the first step in the project, we are mapping the damage caused to nature, through the support of the Ministry of Environmental Protection.

We see this as an opportunity—not just for restoration, but for improvement. Plans include:

Soil rehabilitation

Aerating soil, including planting fungi to accelerate natural recovery

Habitat restoration

Reconstructing riverbanks and reintroducing native species

Nature accessibility

Blazing new trails and building birdwatching sites and picnic areas

By restoring these landscapes, we're not only protecting Israel's unique biodiversity, but also creating spaces where people can reconnect, reflect, and rebuild.

We protect nature so nature can protect us.

Baby's breath,
the first
wildflowers to
blossom after
October 7th.
Credit: Amir
Balaban





A flock of garganeys over Kfar Ruppin.
Credit: Dr. Yoav Perlman



The Future of **Start-Up Nature**

The success of SPNI's existing projects is fueling bigger dreams. With each new achievement, we're setting our sights higher and creating new partnerships to restore more land, protect more wildlife, and create an enduring impact.

In the next five years, we aim to make more public funding available to support rewilding initiatives and launch Israel's first rewilding projects for other terrestrial ecosystems, contributing to Israel's international commitments to protect nature.

We thank you for being part of Start-Up Nature, now and in the future.

Public Investors

Ministry of Energy and Infrastructure
Ministry of Environmental Protection
Ministry of Finance
Ministry of Tourism

Israel Nature and Parks Authority

Carmel Coast Drainage Council
South Jordan Drainage Authority

Open Landscape Fund

Kibbutz Partners

Kibbutz Dafna
Kibbutz Dan
Kibbutz HaMaapil
Kibbutz Hulata
Kibbutz Kfar Ruppin
Kibbutz Maagan Michael
Kibbutz Maayan Tzvi
Kibbutz Sde Eliyahu

Supporting Foundations

Disney Conservation Fund
Gottesman Fund
Leonard and Robert Weintraub Family Foundation
March Conservation Fund
Moriah Fund
Progress Charitable Trust
Teller Foundation

Corporate Sponsors

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Estee Lumer
Freda Rosenfeld & Howard Wallick
Marla and Gidon Stein
Marty, Gary and Robert Goldberg & Bob Rubinoff
Neil Shore

Cover photo: White storks arriving
at our Kfar Ruppin rewilding
project. Credit: Dr. Yoav Perlman



החברה להגנת הטבע
The Society for the Protection of
Nature in Israel