

# PAVING OVER THE PAST

Israel is in the middle of a building boom to house its rapidly growing population, but some researchers fear the country isn't doing enough to conserve its wealth of archaeological sites. **By Josie Glausiusz**



**T**he face carved in limestone is a vestige of a vanished world. With two dots for eyes and a slight hint of a smile, the 7,000-year-old figurine could be a ritual object, perhaps an amulet, or even a simple doll. The thumb-sized face is one of several dozen figures – mostly of goats and sheep – unearthed during an archaeological exploration lasting almost three years at En Esur in Israel<sup>1</sup>, about 52 kilometres north of Tel Aviv.

The excavation at En Esur, also known by its Arabic name of Ein Asawir, “is an extraordinary project”, says Dina Shalem, an archaeologist employed by the Israel Antiquities Authority (IAA), who co-directed the dig with IAA archaeologists Yitzhak Paz and Itai Elad. By the Early Bronze Age, 5,000 years ago, Paz says that En Esur was a “mega-city, the largest so

far known in the Southern Levant”, a region spanning modern Israel, the Palestinian territories and Jordan. Excavating En Esur was, he says, “a once-in-a-lifetime experience”.

Built over the remains of an earlier, smaller village (from which the stone face was unearthed), the metropolis spanned an estimated 65 hectares and was home to between 5,000 and 6,000 people; more than 20 times the typical size of villages in that area at the time. Thanks to a year-round flowing spring, the townspeople of En Esur thrived, growing wheat, barley, lentils, grapes and olives, and raising cows, pigs, sheep and goats.

A visit to the site in November 2019 during an excavation showed how enormous the place once was. Stretching into the distance were the remains of house foundations and alleyways. A grand, 600-square-metre temple enclosed

two massive stone basins – the larger of which was 3.3 metres long and was filled with burnt animal bones, possibly from sacrifices. “We were really amazed at how densely built the city was,” Shalem says, “the planning, the streets”. A gigantic pile of approximately 5 million pottery shards, excavated from the site, attests to the domestic life of this bustling town. “Pottery, flint, figurines, burials – we can tell that it’s a complex society,” she says.

There’s a lot for the archaeologists and labourers to label and store for shipment. But they were not the only ones working at the site. Engineers were also taking measurements for Netivei Israel, the country’s transport infrastructure company, which funded the archaeological excavation in preparation for the building of a road intersection on part of the site. This vanished world, briefly uncovered,

DR. Z. LEDERMAN, TEL BETH-SHEMESH EXCAVATIONS





Road building threatens the site of Tel Beit Shemesh, dating to at least the seventh century BC.

disappeared again from view when it was covered with earth and cement over the winter.

En Esur is a huge site, so most of it is still underground and untouched. But the massive temple and the other excavated parts will remain buried under the road intersection for decades – possibly longer. Critics charge that this important evidence will never be seen again.



**“There are no red lines or any understanding or rules [for] what should be kept.”**

This year, hundreds of other archaeological sites might also be buried or destroyed. That’s because most excavations in the country are salvage digs, authorized by the IAA, the government body that oversees antiquities and archaeological sites within the state of Israel. Salvage digs are conducted to document archaeological remains in danger of destruction because of development plans. But the IAA very rarely blocks construction on top of an important archaeological site or takes steps to preserve some portion of the site from being destroyed, says Yonathan Mizrahi, chief executive of Emek Shaveh, an Israeli non-governmental organization based in Jerusalem that works to protect ancient sites as public assets.

In 2019, salvage digs accounted for more than half of the 424 licences issued by the IAA

for archaeological excavations and surveys, according to the agency. In almost all cases, after the archaeologists excavated the sites and removed valuable artefacts, construction projects were allowed to proceed, says Mizrahi.

Paving over archaeologically valuable sites isn’t unique to Israel, Mizrahi says. In Turkey, for example, the 12,000-year-old town of Hasankeyf, a monumental site on the Tigris river, has slowly been submerged beneath the new Ilisu dam. But some archaeologists say that the situation is particularly problematic in Israel compared with many other countries. One big issue is that the majority of the IAA’s budget comes from the salvage digs before construction projects – and the government itself is the biggest developer in Israel, says archaeologist Uzi Dahari, a former deputy director of the IAA. The country is also building rapidly to keep up with a surging population. Archaeologists also argue that the Israeli government favours saving ancient Jewish sites, especially in Jerusalem, over ones linked to other religions.

In Israel, says Mizrahi, “there are no red lines, or any understanding or rules [for] what should be kept and should be destroyed”.

Gideon Avni, head of the archaeology division at the IAA, says that rather than block construction after a salvage dig, the IAA tries to prevent development projects in advance if a site is known to be important. The agency, he says, follows strict criteria established by the United Nations Educational, Scientific and Cultural Organization when deciding whether or not a site should be permanently saved, or covered and built on. He adds that “every act that we are doing is subject to public monitoring, professional monitoring, our internal system, which tries to prevent this conflict of interest.”

And some archaeologists in Israel say that many sites would not be excavated at all if it weren’t for the construction projects that provide funding and an impetus for digs. Given Israel’s fast-growing population, they say, the country can’t preserve as many archaeological sites as supporters would like. “I would like the whole country to be covered in archaeology,” says Avni. “But my children need a place to live.”

### Growing pressure

Compared with other countries around the Mediterranean, Israel has a much higher concentration of archaeological sites in a smaller area, Dahari says. There are about 35,000 sites in a country of 22,145 square kilometres.

An average of 200–300 archaeological sites are excavated each year as rescue or salvage digs before development. But in evaluating whether construction at the sites can go ahead, the IAA has a conflict of interest because it is heavily funded by the construction industry, says Dahari.

In 2019, construction-funded salvage digs accounted for 83% of the IAA’s budget of



## Feature

426 million shekels (US\$122.7 million). “On the one hand, their responsibility is to restore and to protect archaeological sites, but on the other hand, if you will tell the constructor, ‘don’t build, because this is an archaeological site’, where will the money come from for the IAA? That’s a big contradiction,” Dahari says. “I don’t blame the Israel Antiquities Authority,” he says, “but I blame the government, because of the budgetary system of salvage excavations.”

Yorke Rowan, an anthropological archaeologist at the University of Chicago, Illinois, agrees. “That is one contradictory aspect of the way the IAA works: a major bureaucracy depends on funding from the construction industry to fund itself.” Rowan, who has studied stone bowls, mortars and grinders dating to 5000–3000 BC from previous digs at En Esur, says the difficulty is that the IAA is “mandated to preserve and protect archaeological sites and heritage, but that funding is tied to positive outcomes for development projects”.

Adding to the pressure is Israel’s rapidly growing population. The nation had a fertility rate of 3.1 children per woman in 2018, compared with 1.7 for the United States and an average of 1.6 in the member countries of the Organisation for Economic Co-operation and Development, to which Israel belongs (see ‘Population boom’). Israel’s current population is more than 9 million; by 2065, according to the Israel Central Bureau of Statistics, the population is predicted to swell to 20 million, which would make the country one of the most densely populated on the planet.

The effects of this population boom are obvious across the country. New neighbourhoods crammed with high-rise apartment blocks are springing up on the outskirts of many towns; multi-lane highways criss-cross the country; gleaming malls and industrial zones mark the landscape. Between 2014 and 2017, according to HaMaarag, a consortium of environmental agencies based in Jerusalem, Israel lost 107 square kilometres of undeveloped land to construction and farming.

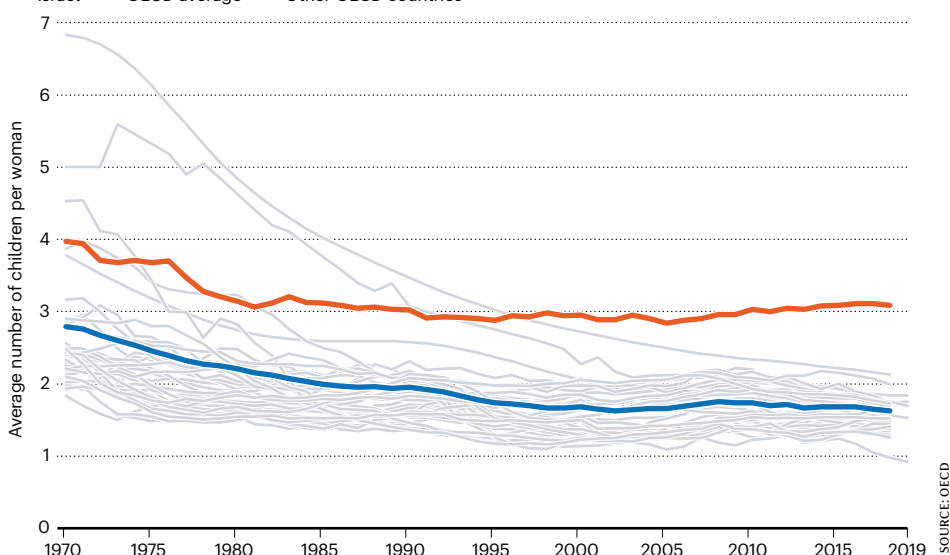
With population growth driving so much construction, says Dahari, “the IAA cannot say, ‘this is an archaeological site, don’t build anything’ – that’s impossible”. He says the authority “is not finding the middle way between the needs of development and the protection of the archaeological site”. Dahari says that during his tenure at the IAA, the agency classified about 700 of the 35,000 sites in Israel as unique archaeological sites and therefore off-limits for development. But some of these 700 sites “are only partially protected”, he says.

The list includes a site called Tel Beit Shemesh, which dates back at least to the seventh century BC. The settlement was possibly a large-scale centre for olive-oil production<sup>2</sup>. Archaeologists regard this site as important because it was located between two rival population centres more than two and a half

## POPULATION BOOM

Israel’s fertility rate is the highest in the 37 countries in the Organisation for Economic Co-operation and Development (OECD).

— Israel — OECD average — Other OECD countries



millennia ago. It would take archaeologists decades to study this kind of site, but a four-lane highway will soon run through it. That is, says Dahari, “in my point of view, a crime against archaeology”. Avni acknowledges that the construction at Tel Beit Shemesh, “was a very, very painful compromise for us”, balancing the need to preserve the site and building a highway that would serve up to 250,000 people. He said the current plan is to recreate the site in a park on a bridge over the highway.

## National narratives

Time is also running out for an ancient hill village called Nebi Zechariah that is at least 2,000 years old. The excavations of the village lie in an industrial zone on the outskirts of Modiin, a city about 26 kilometres northwest of Jerusalem. The excavated buildings have a forsaken air. The stone walls, doorways and mosaic-tiled floors are overgrown with brambles and weeds; a nearby billboard trumpeting a new industrial and logistics centre is pasted with a red sign saying “sales closed”. In the distance, the high-rise blocks of the expanding city of Modiin can be glimpsed. By 2040, according to the city plan, the addition of 43,000 housing units will enable the population to more than double, from 93,000 to 240,000. And those plans call for construction in the city’s industrial zone, including over Nebi Zechariah.

The ancient site was clearly once a bustling place. Originally founded as a Jewish village during the Roman period, beginning in 63 BC, it was occupied continuously for about 1,000 years by waves of polytheists, Byzantine Christians and Muslims, living together until it was abandoned in the eleventh century during a period of climate-change-induced drought. Its inhabitants built luxurious houses paved with mosaics, chiselled Christian crosses and

Greek inscriptions into their olive presses, and produced glass weights inscribed with Arabic script for weighing coins.

“There is a very interesting story in this type of site, because it consists of a kind of continuity of the rural population of ancient Palestine from Roman until Crusader times,” says Avni. “It also shows a kind of living together of different communities in a settled place at the same time.”

But that does not mean the decision to build on it was wrong, according to Avni. He says that the settlement is just one out of 400 similar sites of the period in Israel. “It’s not unique when you look at the whole country,” he says. And population pressures inevitably lead to compromises that enable modern development. Even so, “it’s really a pity, when you look at it as a citizen, to destroy it”, he says. “It’s a beautiful site, and could have been preserved as a park.”

That’s unlikely to happen. Eyal Malul, a spokesperson for the municipality of Modiin, says part of the land is designated for building.

Nebi Zechariah and sites like it might have a better chance of being preserved if they dovetailed with Israel’s national narrative, Mizrahi suggests. “In general, the Israeli government, for generations, is dealing with Jewish history,” he says. As an example of the government’s interest in preserving Jewish history through archaeology, Mizrahi and other researchers point to a site called the City of David, located in the Palestinian neighbourhood of Silwan in East Jerusalem. An organization called the Ir David Foundation (El-Ad) is authorized by the government to sponsor excavations there and run the City of David National Park. El-Ad claims that the biblical King David built a palace in the City of David 3,000 years ago and says it is “dedicated to the preservation and development of the Biblical City of David”.

But there is serious disagreement among archaeologists as to whether the large structure that El-Ad identified as King David's palace was actually from the era in which the biblical king supposedly lived, and whether this ancient stone structure can be linked to him. "El-Ad's narrative is based on biblical history, not archaeology. They are content as long as archaeology doesn't contradict their reading," says Raphael Greenberg, an archaeologist at Tel Aviv University. He argues that El-Ad is "supported by the Israeli administration, that uses archaeology selectively to market its ideology".

El-Ad rejects that argument. Doron Spielman, a spokesperson for the organization, says that there have been 20 excavations of the site over 150 years and they have found numerous carved inscriptions and clay stamps with the names of biblical figures. "There is no other place on Earth that has found more corroborative evidence of the biblical story than the City of David."

When it comes to saving or excavating ruins, Avni says, "we have been accused many times of giving preference to Jewish sites or synagogues. When you look at the history of archaeology in this country, it's not baseless." But he says that those criticisms applied to the early years of the country's modern history, and that now, "most of the sites we are excavating are Byzantine Christian, early Muslim, medieval Muslim and Ottoman." Avni's own speciality is early Islamic archaeology.

Yet some researchers say that when archaeological sites involve religions other than Judaism, they sometimes get less

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protection. And many Israelis aren't aware that people of different religions coexisted in the region after Islam arrived in the seventh century AD, says Mizrahi. He adds that sites from the early Islamic period "are extremely important to be preserved and Nebi Zechariah is a very good example of that".

### Possible solutions

Without financing, however, the likelihood of preserving such sites is slim. Unlike the excavations funded by El-Ad, very few of the digs that the IAA conducts are financed independently. There would be no excavation at En Esur had a road junction not been planned there, and laboratory research on material collected at the site will continue for years, say the IAA archaeologists who work there. "What we rescue is the knowledge, not necessarily the site," says Paz. He and the other IAA archaeologists who excavated En Esur declined to say whether the site itself should have been preserved.

But others aren't so guarded. Greenberg, an expert on the Bronze Age in the Levant and a former IAA employee, questions the speed at which the salvage dig at En Esur was conducted, although he emphasizes that this is

not the fault of the archaeologists but of the system that forces rapid excavations. "Because the site was excavated under severe time constraints, and because of the unprecedented quantity of finds that must be processed, it will be years before we have a detailed understanding of the results," he says.

Less-destructive alternatives exist, Greenberg contends. For example, he suggests that 5% of the threatened site could have been set aside and excavated thoroughly, with the road project covering the rest of it.

Greenberg has general concerns about speedy salvage excavations. Academic excavations typically take many years. Researchers alternate time in the field with longer stretches in the lab to study findings and adjust their plans for later stages of the dig. That's not possible during a salvage operation, he says.

The kind of alternative that Greenberg envisaged for En Esur is sometimes possible in other countries, such as the United States and France, even if excavations do get paved over there, too. Archaeologist Morag Kersel at DePaul University in Chicago, points to the Miami Circle in Florida, a round structure linked to the Native American Tequesta people that was scheduled to be destroyed, but was preserved after protests. Sometimes, she says, "when it is feasible, projects are redesigned to avoid the destruction of the site".

One difference in the United States, explains Rowan, is that "there is an extra level of oversight at the state level". Each US state has a State Historic Preservation Office that oversees surveys and excavations. If nothing important is found during a salvage survey, the office will approve the site for development, but it can mandate extra testing, including remote sensing and excavation, if significant evidence is found.

"Something like En Esur, if it was in the United States, that would be stunning. There's not a chance you would pave it over," says Rowan. "I have great faith that they did a good job, because I know the archaeologists. It does seem a shame to pave over a site like that."

Archaeologist Pierre de Miroschedji, former director of research at the French National Centre for Scientific Research in Nanterre, calls En Esur "a great discovery". In France, he says, "it has happened many times that the line of a highway had to be changed because an important discovery was made".

Even so, his approach is pragmatic: "We have to look for an equilibrium, for balance, between the necessity of modern life and the necessity of preserving the heritage."

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1. Elad, I. & Paz, Y. 'En Esur (Asawir). *Excavations and Surveys in Israel* Vol. 130 (Israel Antiquities Authority, 2018).
2. Haddad, E. & Ben-Ari, N. *Bet Shemesh, Tel Bet Shemesh. Excavations and Surveys in Israel* Vol. 131 (Israel Antiquities Authority, 2019).



Archaeologist Dina Shalem (left) with a clay vessel from the ancient village of En Esur.