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Fig. 1. Southeast corner of Judean kingdom (Iron II) site in the Negev. Photo: Seth H. King.

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The Negev

NELSON GLUECK

Hebrew Union College-Jewish Institute of Religion

In tribute to my teacher and friend William Foxwell Albright

Follow almost any well trodden Bedouin trail in the Negev and it will lead you from one ancient site to another, datable by fragments of pottery among their foundation ruins, razed often to the very ground by time or tragedy or both. Unchanging topography has conditioned the locations and directions of the cross country pathways or roads, whose lines have varied but little throughout the long story of man's coming and going along them. Look for springs, however few they may be, and wells and cisterns too, and they will indicate the presence of settlements of centuries in their vicinity. Gaze at the slopes of hills, however rocky and barren, for the telltale grooves cut into them for considerable distances to lead the rare rainwater to reservoirs or cisterns or to terraced fields in or alongside the dry stream beds below. Check every shrub-fringed, frequently stone-lined channel leading across any slightly sloping wilderness plain, even if blanketed with a shattered cover of darkened sandstone pebbles and glaringly black flint fragments. You will find almost invariably that at its end is a cistern or a stretch of good soil, held firmly in place by a series of strong cross walls to withstand the scouring freshets of the occasional winter and spring rains. Acquaint yourself with the needs and fears, the moods and manners, of the broken array of peoples and civilizations that appeared at intervals along the horizon of time and, in a general way, you will know in advance where to look for the clues they left behind in the course of their passage. Isolated hilltops overlooking cultivable stretches and strategic roads were preferred in the Judaeon period of Iron II; fertile slopes open to the breezes were the predilection of their predecessors of Middle Bronze I during the Age of Abraham. And above all, read the Bible, morning, noon

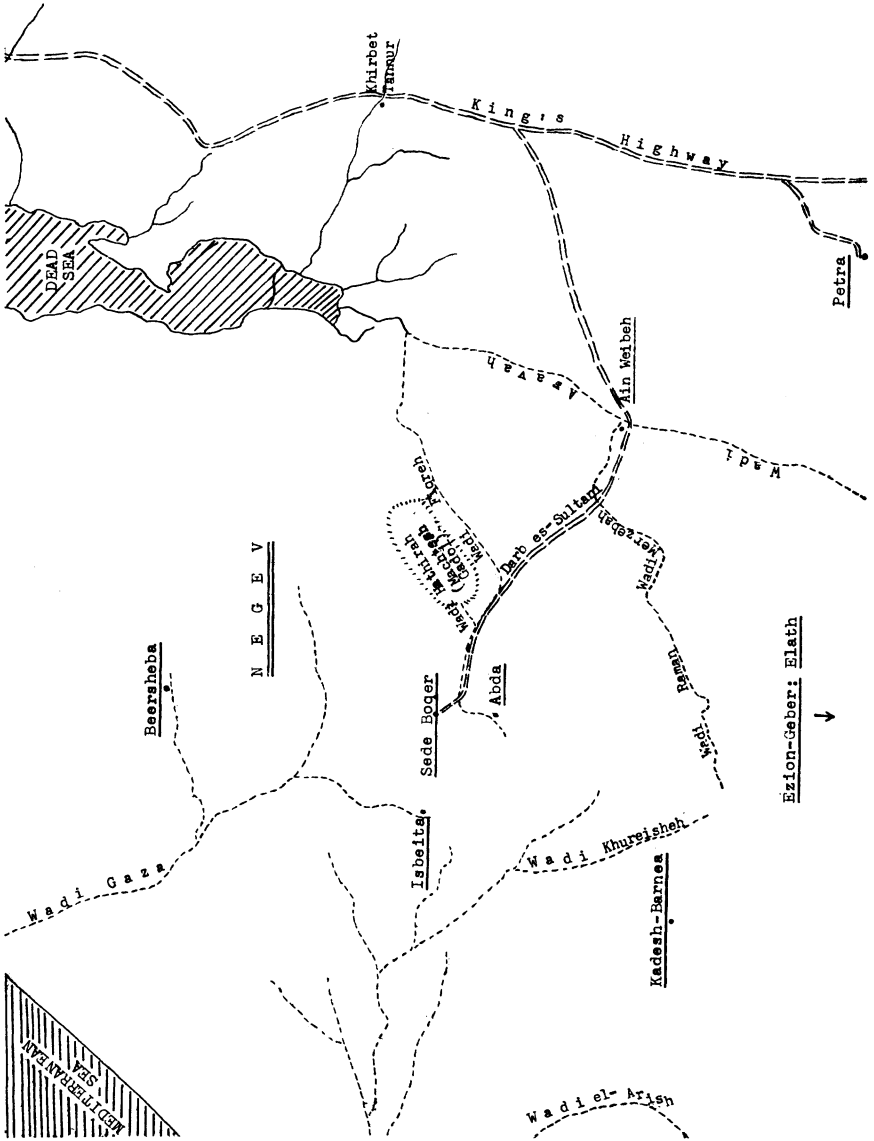


Fig. 2. Outline map of the North and Central Negev, showing prominent geographical features referred to in this article. The dotted lines follow the courses of dry stream beds or wadis, while the double dotted lines indicate the courses of the King's Highway and the Darb es-Sultani. The course of the latter from the Wadi Arava east is only the most probable of several possible routes.

and night, with a positive attitude, ready to accept its historical references in whatever context they occur as arising from fact, until or unless other factors suggest other procedures.

And then go forth into the wilderness of the Negev and discover, trite as it may sound, that everything you touch turns into the gold of history, and that it is almost impossible not to stumble across the treasures of a robust past, whose existence becomes as real and as full of content and color and sound and fury and the thrill of progress and the pity of failure as the transient present, which is always ticking away so furiously to join the throng of those that need no longer hurry.

For several months each summer during more than a Sabbath of years commencing in 1951, the Louis M. Rabinowitz and David W. Klau archaeological expeditions, under the auspices of the Hebrew Union College-Jewish Institute of Religion, and with the assistance of a grant-in-aid from the American Department of State, under the Special Cultural Program for Israel, have been venturing forth into the Negev, learning that it was inhabited by civilized peoples from at least the Late Chalcolithic period (the second half of the fourth millennium B.C.) on. Its tattered history was conditioned by its enduring geopolitical importance, which it obtained as a birthright through the providence of creation. As a key part of the immensely strategic strip of land along the eastern end of the Mediterranean, binding Asia and Africa together, it has suffered frequently and frightfully from their mutually antagonistic forces. The ambitions and anxieties of the rulers and populations of both have been like regularly recurring plagues of locusts bringing devastation to the land. The objective of Egypt has always been the fertile Tigris-Euphrates basin and that of Mesopotamia the rich Nile valley. The failure of either to vanquish the other for long has never deterred their successors from repeating their folly and seeking or securing dominion over Palestine and the Negev and Sinai, to pave the way for their volatile victories.

The existence of Late Chalcolithic settlements in the Negev is now a matter of record. To be sure, only a few have been found¹ and they were threadbare poor in comparison with the Tell Abu Matar of that period, on the outskirts of Beersheba, which has been so brilliantly excavated by Jean Perrot. But then, in general, the ancient settlements in the Negev, with some Iron II and fairly many Nabataean and Byzantine exceptions, differ from their contemporaries in the more favored areas to the north of it, as do stands of wheat, planted on soils and under conditions ranging from unfavorable to excellent.

Our assumption that Chalcolithic sites of the same vintage as those previously discovered in the northern Negev might well be found also in the

1. *Bulletin* 152, p. 19; 145, pp. 13-15; *Rivers in the Desert*, pp. 54-59.

central Negev² was borne out during our archaeological explorations in the summer of 1959. The production of sophisticated copper articles at Chalcolithic Tell Abu Matar, which, as Jean Perrot has shown, included smelting and manufacturing processes based upon selected ores of high mineral content obtained from the Wadi Aravah,³ emphasized in part its high cultural achievements and its connections with a widespread Chalcolithic civiliza-



Fig. 3. Cistern originally built during the Judean kingdom in the Negev, site 152. Photo: Hebrew Union College-Jewish Institute of Religion.

tion. Basalt bowls and pottery vessels and other objects also underscored the relationship, which thus involves trade routes serving as lines of communication and acculturation.⁴

Our discovery this summer of an extensive Late Chalcolithic to Early Bronze I site overlooking from the south the Wadi Murrah (Nahal Zin) and of another farther southeast along the Darb es-Sultani, which passes in part

2. *Bulletin* 152, p. 19; *Rivers in the Desert*, pp. 86-87.

3. *Israel Exploration Journal* V.1, 1955, pp. 79, 80, 84; *Rivers in the Desert*, p. 44.

4. *Israel Exploration Journal* V, 1955, pp. 17-40, 73-84, 167-189; VI:3, pp. 163-179; *Bulletin* 145, pp. 13-15; *Rivers in the Desert*, pp. 49, 56-59.

above and alongside it before bending away to follow the line of the Wadi Merzebah down to the Wadi Aravah, reveals the existence of such early settlements in the central Negev, in addition to those in the northern Negev.⁵ It is likely, furthermore, that similar sites, datable by clear pottery fragments, will yet be found also in the southern Negev and in the Wadi Aravah (Arabah), particularly along important travel routes. The boundaries of civilized settlement in the Negev are thus being pushed farther back with these new discoveries. We found another Late Chalcolithic site at the western approach to the Wadi Hathirah (Mahtesh Gadol).

It may be said in connection with the mention of the Darb es-Sultani, that as a result of our very careful examination of it in the summer of 1959, along its entire length from Sede Boqer on the border between the Northern and Central Negev⁶ and continuing ESE and SE down to 'Ain el-Weibeh (Ain Yahav) in the Wadi Aravah, which it crosses ultimately to join under a different name the north-south King's Highway in Transjordan, we found that it was one of the most important travel routes in the entire Negev. It connected at its western end with others that led north to Beersheba and southwest to Kadesh-barnea in Sinai. Experience should have taught us that when a name such as Darb es-Sultani, the Road of the Sultan, which is the Arabic equivalent of the Biblical name of King's Highway, is attached to a travel route, it means exactly what it says both for ancient as well as modern times. We found a whole series of stone built villages or caravanserais alongside of it, belonging to the Late Chalcolithic-Early Bronze I (ca. 3500-2900 B. C.), Middle Bronze I of the 21st to 19th centuries B. C., Iron II of the 10th to 6th centuries B. C., Nabataean-Roman and Byzantine periods, with the last coming to an end in the 7th century A. D. The gaps in between these periods of history correspond exactly to those of the broken pattern of the history of civilized, permanently or semi-permanently occupied settlements in the Negev that has manifested itself during all the previous years of our archaeological investigations there.

Most of the settlements along the Wadi Murrah (Nahal Zin) and the Wadi Merzebah were occupied in nearly every one of the above mentioned periods, with the exception of the Late Chalcolithic, and the explanation may be that we succeeded in finding the confirmatory potsherds of only two sites there of that particular period. The direction of the Darb es-Sultani was fixed during all these periods by the compulsions of unchanging topography. The possible places for villages or caravanserais along the way were so limited in number, that each wave of occupants in widely separated

5. *Rivers in the Desert*, pp. 56-59.

6. *Rivers in the Desert*, pp. 86-87.

centuries had to establish itself again on the same spots its predecessors had chosen. The discontinuity as well as the nature of the various occupations precluded, however, the development of *tells* at these places, such as can be found in the Negev only in the Beersheba Basin.⁷

Some of the largest Middle Bronze I sites we have ever come across in the Negev were among the sites we found along the banks of the Wadi Murrah (Nahal Zin) and the Wadi Merzebah this summer, each spread over many acres of area. The stone foundations of houses with attached



Fig. 4. Site 345, of the Abrahamic period, showing foundations of conical houses of Middle Bronze I, 21st to 19th centuries B.C., village. Photo: Israeli Air Force

courtyards, with many of the houses belonging apparently more or less to the "beehive" type,⁸ which seem to be characteristic of the age at least in the treeless Negev, and fragments of pottery strewn among them absolutely similar in large measure to those of the same period commonly found in the entire range of Middle Bronze I sites from southern Syria to the borders of Egypt,⁹ gave abundant evidence of their particular centuries in the calendar of history.

Our expedition came across other Middle Bronze I sites elsewhere in

7. *Rivers in the Desert*, pp. 6-7, 50.

8. *Rivers in the Desert*, pp. 76-77; *Bulletin* 149, p. 15.

9. *Rivers in the Desert*, pp. 60-61.

the Negev this summer, including one overlooking the Wadi Khureisheh. Our belief, expressed in this journal some years ago, that numerous Middle Bronze I sites would be found in the Negev beyond those we had already discovered then, and the existence of which confirmed the general validity of the historical memories of the Age of Abraham surviving in chapters



Fig. 5. Cup-holes in Basutoland used as receptacles for pounding grain with stone pestles. Photo: James Walton.

12, 13 and 14 of the Book of Genesis, has been fleshed out into firm knowledge by discoveries of Middle Bronze I sites made every time we have gone forth into the Negev during the successive years since then.¹⁰

10. *Biblical Archaeologist* XVIII:1, 1955, p. 6.

It may be remarked parenthetically with regard to the Middle Bronze I sites of the Age of Abraham in the Negev that one of the ways to find them is to look for cup-holes or cup-marks. We have come to the conclusion, fortified by modern examples, that they were generally used as rock-bound mortars in which kernels of grain, for instance, were placed to be pounded into flour with a stone pestle. Grain is still ground in exactly this fashion in some primitive villages in Basutoland in South Africa.¹¹ We found these cup-holes again at almost every Middle Bronze I site that we came across this summer. Wherever we found the ruins of conical or oval houses we



Fig. 6. Walled Judean kingdom fortress on top of hill overlooking Wadi Aravah. Photo: Israeli Air Force.

would look first of all for Middle Bronze I potsherds and then for cup-holes on flattish rock-surfaces close by or among the ruins of the site. Sometimes, we would come across the cup-holes first, which served almost as a sign-board of the existence in the immediate vicinity of a Middle Bronze I site.

The next period of civilized settlement in the Negev is that of Iron II, extending from the 10th to the 6th centuries B.C. The land was dotted then with fortresses on strategic hilltops, and with agricultural villages usually on the slopes below them. Their inhabitants tilled strongly terraced

11. *Bulletin* 149, pp. 10, 15-16; *Rivers in the Desert*, pp. 77, 83-84; *Illustrated London News*, Sept. 7, 1957, p. 375.

fields generally in or alongside wadis or dry stream beds, dug cisterns, many of them still in use by modern Bedouins,¹² and engaged also in extensive pastoral, commercial and industrial activities. These included tending their flocks and herds of domestic animals, trading with Egypt and Arabia, mining and smelting mainly copper found in and alongside the Wadi Aravah, and refining it and manufacturing it into finished copper



Fig. 7. Judean kingdom cistern in the Negev, still watertight, with water from rains of February-March 1959. Photo: Nelson Glueck.

articles at Ezion-geber:Elath, as established by our excavations there. The amazing correctness of historical memory in the Bible was emphasized years ago, in one of many instances which might be cited, by our discovering, and dating through pottery finds, copper mining and smelting sites in

12. Cross and Milik, *Bulletin* 142, pp. 5-16; Glueck, *Bulletin* 152, pp. 23, 30, 32-34; no. 155, pp. 3, 4, 7, and notes 2, 3, 12; *Rivers in the Desert*, pp. 172, 174, 222; II Chronicles 26:10.

and alongside the Wadi Aravah. This was in full accord with the hitherto enigmatic statement in Deuteronomy 8:9: "You shall inherit . . . a land whose stones are iron and out of whose hills you can dig copper."¹³

It was only from the time of David, who beat back the Amalekites and the other Bedouins of the Negev to the perimeters of the desert whence they came and from which, to be sure, they emerged again during every period of weakness of the authority of the throne in Jerusalem, that it was possible for the people of Judah to exploit the potential of the Negev. This

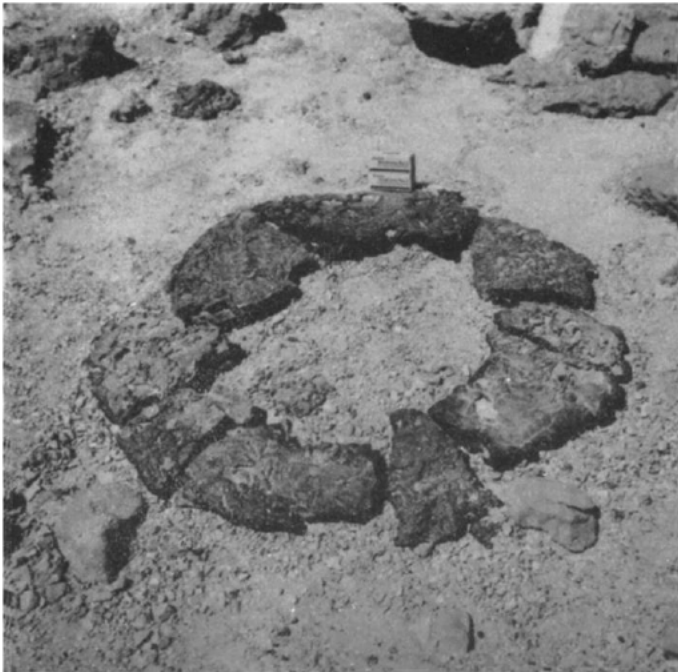


Fig. 8. Solomonian mining and smelting installation, involving a slag circle whose inner circumference corresponds to outer dimensions of smelting jar, from Wadi Amrani, 5 miles north of Eliat. Photo: Nelson Glueck.

occurred particularly under kings like Solomon and Uzziah. One of the results which can now be proven archaeologically was that the south-westernmost part of the territory of Judah extended through the Negev to the natural boundary line formed by the Brook of Egypt, the Wadi el-Arish, which bisects north-south the center of the length of Sinai (I Kings

13. *Biblical Archaeologist* I:2 (1938), p. 8; 1:3 (1938), pp. 15-16; II:4 (1939), p. 40; III:4 (1940), p. 54.

4:24). We have discovered, for instance, a whole line of Judaeon, Iron II fortresses, guarding the ancient route leading directly through the Wadi Khureisheh to and from Sinai. An Iron II Judaeon fortress was discovered at 'Ain Qudeirat (Kadesh-barnea) years ago by T. E. Lawrence, and others have been discovered in Sinai, as well as numerous Middle Bronze I sites since then.¹⁴

It is understandable, therefore, why we have found no Iron I (12th to beginning of the 10th century B.C.) Israelite sites or pottery in the Negev during the years of our archaeological explorations there. The power of



Fig. 9. Slag at Timnah in the Wadi Aravah. The copper mined here was given a preliminary "roasting" on the spot, before being further refined in Solomon's smelter at Ezion-geber. Photo: HUC-JIR.

Israel before the reign of David was not great enough to create and maintain by force of arms and effective governmental authority the conditions of political and economic security and peace which are prerequisite for the rooting and blossoming of civilized settlement, with its appurtenances of agriculture, animal husbandry, industry and commerce. The Iron II or Judaeon occupation of the Negev is evidenced by an impressive number of

14. *Bulletin* 145, pp. 15-16, 21-25; 152, pp. 30-38; *Riders in the Desert*, pp. 170-172; Rothenberg, *Tagliyat Sinai*, pp. 120, 133-132; Aharoni in *Antiquity and Survival*, II: 2/3, 1957, pp. 295-296.

the nearly 500 ancient sites we have thus far discovered there. The remains of fortresses and villages, some of whose walls with corners of characteristic header and stretcher construction are, in places, amazingly well preserved, and of cisterns and terrace walls, some of which are still practically intact and serve their original purpose to this very day, and the datable pottery fragments found among them, tell the story of the Judaeen occupation of the Negev in Iron II in considerably more detail than is found in the pages of the Bible. It was, however, the testimony of the Bible, which convinced us, before we ever commenced the archaeological exploration of the Negev, that it was not in ancient times almost completely an uninhabited and uninhabitable land, as prior to that time it had generally been conceived to be.

There are two kinds of Iron II pottery found in the Negev: the smaller proportion is generally the same as types commonly found in Judah and Israel of the same period, while the other is a more common kind which prior to our excavations of Ezion-geber: Elath was totally unknown and which appears to be much earlier to the uninitiated. It is coarse and crude and almost always handmade, frequently employing horn or ledge or knob handles and often with spirally grooved bases reflecting the coiled straw mats on which the pottery clay was placed before being fashioned by hand into the desired shape. This type of pottery was, we believe, largely the handiwork of the Kenite, Rechabite, Calebite, Yerahmeelite and related inhabitants of the Negev,¹⁵ who adopted a sedentary or semi-sedentary civilization in Iron II, but who had lived an almost completely nomadic life in the Negev and the Wadi Aravah and Sinai and probably in the areas of Midian in Arabia during and perhaps even before Iron I.¹⁶ There can be no question but that the Kenites were at home in Sinai and the Negev and the Wadi Aravah also during and before the time of Moses and the migratory movements of the Israelites through these latter territories en route to the Promised Land.¹⁷ That the particular journey of the Israelites, described in the Bible, through Sinai, the Negev, part of the Wadi Aravah and east around Edom and Moab before turning west to cross the Jordan and enter the Promised Land at Gilgal could not have taken place before the 13th century B.C. was demonstrated by our archaeological explorations, which showed, in harmony with Biblical accounts, that these kingdoms were strongly entrenched at the beginning of Iron I, with sufficient power to deny the Israelites permission to utilize the King's Highway through their territories.¹⁸

15. *Bulletin* 155, pp. 10-12; 152, p. 34; 145, p. 23; *Smithsonian Report for 1941*, p. 478. This type of crude Iron II pottery has also been found by others in the Negev during the last couple of years; cf. *Israel Exploration Journal* VIII:4, 1958, p. 241 and pl. 49-52.

16. *Smithsonian Report for 1941*, p. 478.

17. Exodus 2:15-22; Numbers 21:8-10; 33:43; Judges 1:16; I Samuel 15:5-7; *Rivers in the Desert*, pp. 45-86, 111-112, 132-134.

18. *The Other Side of the Jordan*, pp. 128, 140-147.

Following the Babylonian conquest of Judah in the 6th century B.C., the works of civilization in the Negev came to an end, with the elements and the Bedouins breaking down what had been reared in painful labor. The land remained waste and empty with the exception of the northernmost part which touched the territory of the Idumaeans. In time, however, the void was filled, the Bedouins repelled, the desert reclaimed, the terraces and cisterns of the Judaeans included in vastly larger and more intricate systems of water and soil conservation, and villages and towns

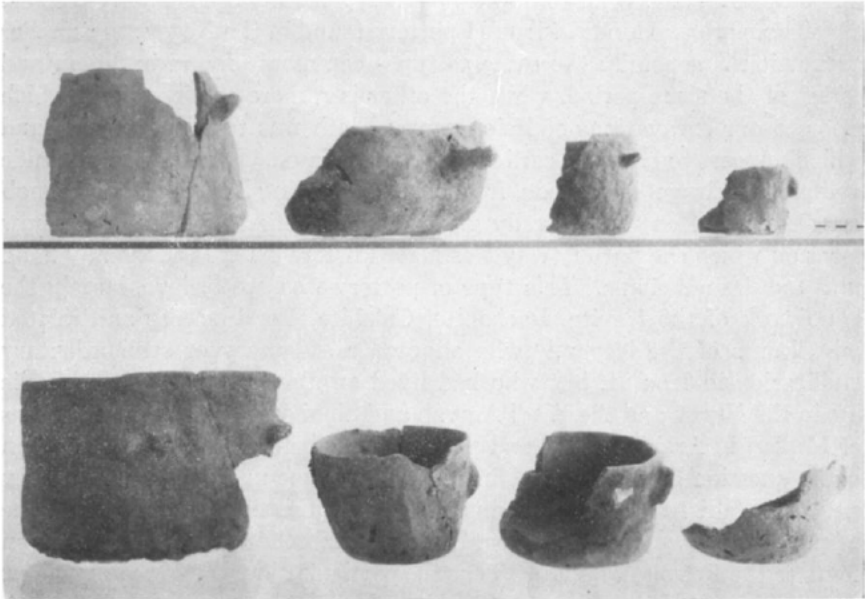


Fig. 10. Hand-made, coarse, Iron II pottery from Ezion-geber: Elath, with horn- and ledge-handles. Photo: HUC-JIR.

and temples by the scores were established completely anew, when the Nabataeans incorporated the Negev and Sinai into their swiftly developed kingdom. Its heyday extended between the second century B.C. and the second century A.D. With the base of their kingdom in the former territories of the kingdoms of Edom and Moab, their capital at Petra where the Biblical Sela' had been located, their domain including also northern Arabia and southern Syria, as well as the Negev and Sinai, the Nabataeans fashioned with furious creativity a magnificent civilization, whose meteor-like brilliance was extinguished all too soon by Roman conquest.

The Negev was of great importance to the Nabataeans. The incense and spices and other precious products of the East were transported in large measure across it for reshipment to Palestine and Egypt and to other lands bordering the Mediterranean Sea. Great emporia sprang up in connection with this commerce, with one of them, known as Abda today, named probably after one of the Nabataean kings called Obodas. A small sculpture discovered there recently resembles some of those from our



Fig. 11. Qetsiot near Nitsanah. Rows of pebbles, with *teleilat el-'anab* among them, converging on water channels, designed to help collect runoff of occasional rains and lead it to terraced fields in the Wadi Hafir at bottom of picture. Photo: Israeli Air Force.

excavations of the Nabataean temple of Khirbet Tannur in Transjordan. Every available inch of soil was put under cultivation, every possible drop of water channeled into terrace-corseted fields or into many hundreds of reservoirs and cisterns. Whole hillsides were used as catchment basins and barren slopes were dotted often with intricately designed rows of piles of small stones (wrongly called *teleilat el-'anab*, "grape-vine mounds"), or with whole rows of such stones. These patterns served to help catch and lead some of the rare rainwater (as has correctly been explained, we believe, by

Hebrew University scholars) to terraced fields or into cisterns below.¹⁹ Fragments of the inimitable Nabataean pottery of sophisticated beauty and delicacy litter the surfaces of hundreds of Nabataean ruins in the Negev, with Nabataean inscriptions and rock-drawings frequently visible at various places to attest further to the fleeting presence of Nabataeans in the land.

After a comparatively brief period of decline following the Roman conquest of the Nabataean kingdom, the Negev experienced an efflorescence

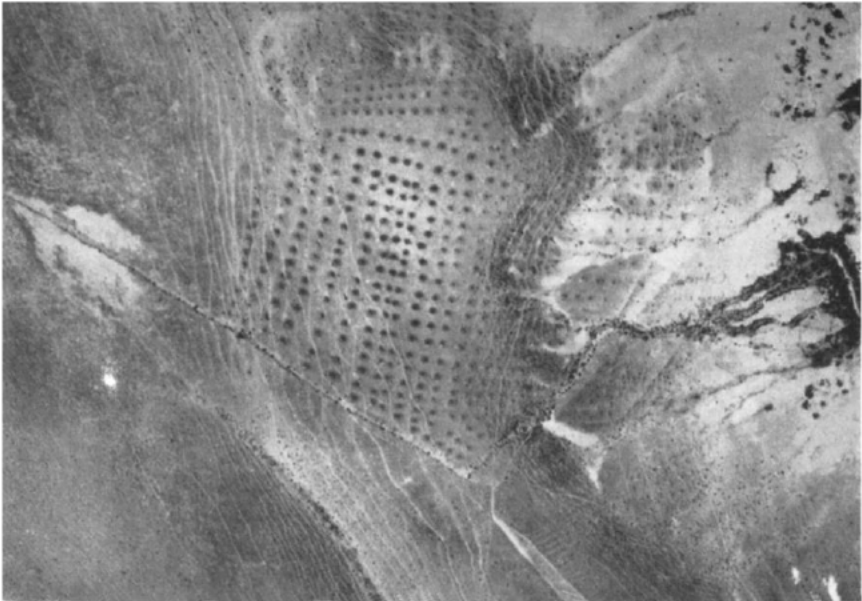


Fig. 12. *Teleilat el-anab* and diversion channel at Qetsiot, above Wadi Hafir. Photo: Israeli Air Force.

of civilization which equalled and in some ways surpassed the Nabataean one. Every skill employed by the Nabataeans to wring sustenance from a marginal land of extremely limited rain was exercised by the Byzantines, who were by and large the Christianized descendants of the Nabataeans. Retaining their identity, however, were communities of Jews, whose synagogues were contemporaneous with the vastly larger number of resplendent Byzantine churches that sprang up in the Negev to replace every vestige of the preceding Nabataean, pagan temples. The history of early Christian art and architecture and particularly of Byzantine churches can

19. *Bulletin* 155, pp. 4-6, n. 8-9. [Cf., however, the views of Myerson in *Bulletin* 153, pp. 19-31 who has made a fine case for an interpretation of these mounds as places where vines were planted. It is difficult to see how such little mounds could efficiently distribute the run off of water. Editor.]

no longer be studied without considering such previously known sites as Abda and Isbeita, now being partly restored and being made accessible by the Government of Israel, and without considering the hundreds of Byzantine ruins discovered during the course of the last eight years by our ex-



Fig. 13. Byzantine church at Abda in the Negev. Photo: Nelson Glueck.

peditions of archaeological exploration. The Byzantine period in the Negev came to an end early in the seventh century A.D. as a result of the Mohammedan conquest. Darkness and disintegration and reversion to desert have characterized its history since then, with the dawn of a promising new day breaking over it once more since the return of modern Israel to the Southland of the ancient kingdom of Judah.²⁰

20. For the history of the Nabataean and Byzantine occupation of the Negev, cf. *Rivers in the Desert*, pp. 191-284.