

Apollonia/Sozousa: Its Immediate Hinterland in Byzantine Times

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Byzantine Apollonia/Sozousa

Located on the Mediterranean coast of Israel some 17 km north of Jaffa (ancient Joppa, south of Tel Aviv) and 34 km south of Caesarea, the site of Apollonia-Arsuf has been excavated almost continuously during the last 40 years (Introduction, above). Once a modest coastal settlement, Apollonia-Arsuf became the urban center of the southern Sharon Plain (at least its coastal strip) as early as the Persian period through the Crusader period. It is mentioned in a series of classical sources from the Roman period¹, which mostly relate to Judaea's coastal towns.

In written sources from the Byzantine period, it is recorded twice in the anonymous *Cosmography of Ravenna* in a list of urban centers of *Iudaea-Palaestina*², where it appears after Caesarea and before Joppa, and again between Joppa and Caesarea in a long list of the coastal cities of Sinai and Palestine.³ Apollonia also appears in the detailed list of 25 cities of that name compiled by Stephanus Byzantius under number 13 'near Joppa'.⁴ On the other hand, Apollonia does not appear in early ecclesiastical lists. Two 19th-century scholars, Stark and Clermont-Ganneau, assumed that the reason for its absence derived from the fact that Apollonia's name had been changed to Sozousa – a common change for cities named after Apollo Sōter in Byzantine times.⁵ Later texts and critical editions of texts, which recount the Persian-Sassanian capture of Jerusalem, record the death of the patriarch Modestus in a city named Sozos: Sozousa in Georgian texts and Arsuf in Arabic texts.⁶ Official documents of the synod of Ephesus held in 449 CE indicate that in the mid-5th century, Sozousa was a city in the Byzantine province of *Palaestina Prima* and that its Christian community was headed by a bishop. Bishops of Sozousa appear again in the records of two 6th-century ecclesiastical meetings.⁷ They may have served in the church with an inscribed mosaic floor that was uncovered in Apollonia in 1962 and 1976.⁸

The importance of Sozousa in late Byzantine Palestine (6th–7th centuries CE in archaeological terms), seems to have been enhanced by the large and affluent Samaritan community that resided in the city until the Islamic conquest, as is evident from the archaeological finds.⁹ Arsuf is also mentioned in connection with the Sassanian military campaign in the Holy Land.¹⁰ As there is no evidence of destruction, it may be assumed that the city surrendered peacefully to its Persian-Sassanian conquerors.¹¹ The *Acta Anastasii Persae* relate that the escort conveying the relics of the Christian martyr Anastasius the Persian from Caesarea to Jerusalem in 631 – soon after the Persians evacuated Palestine – marched via Sozousa. This indicates that the name Sozousa continued to be used for Apollonia-Arsuf until the Islamic conquest.¹²

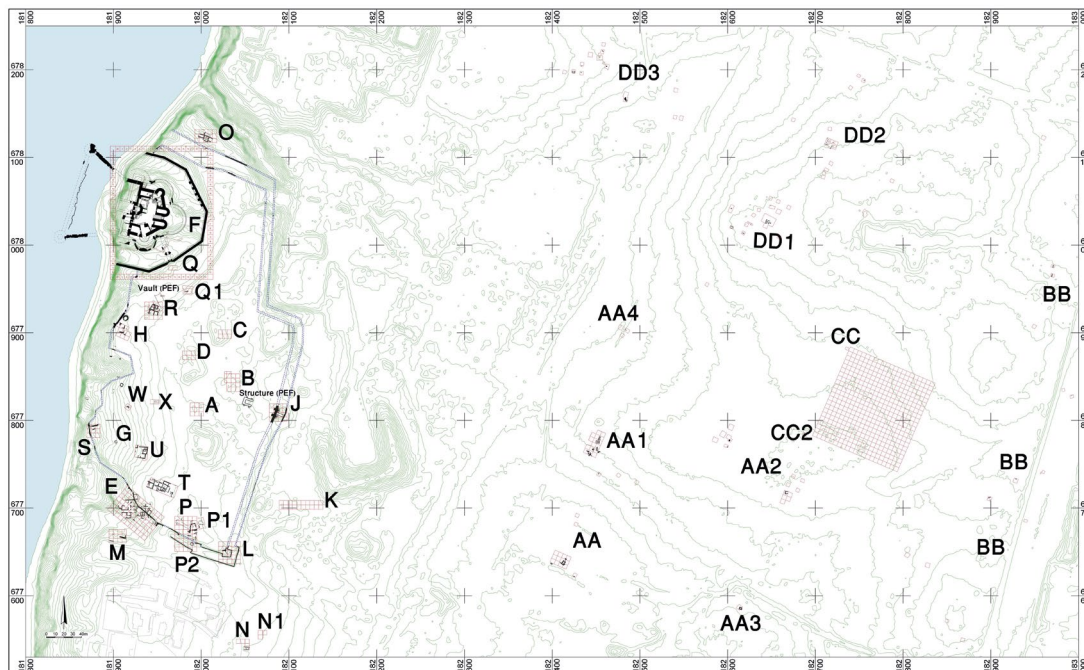


Fig. 1: Apollonia/Sozousa: Site plan with areas of excavations in the inhabited town and its immediate hinterland.

Byzantine Occupation Remains

Extensive excavations at Apollonia-Arsūf over the last 26 seasons (1977–2018) have uncovered numerous architectural remains of the Byzantine period (fig. 1). The site extended over an unwalled area of some 28 hectares – the largest area in its history of occupation. Among the architectural remains are a church¹³, possibly a Samaritan synagogue¹⁴, and industrial quarters with winepresses¹⁵, oil presses, plastered pools, and raw glass furnaces.¹⁶ Excavations at the site's Byzantine-period agricultural and industrial hinterland on the eastern outskirts revealed several additional architectural remains – field towers (fig. 2), wine presses (fig. 3), tombs (mostly of earlier periods) (fig. 4) and other installations – as the area was used mainly for growing crops. Refuse pits in the area were utilized for the disposal of waste from the settlement (fig. 5), and their contents served as fertilizer to enrich the soil in the nearby fields.¹⁷

There is every reason to believe that the medieval walled town of Arsūf occupied the core site of the Byzantine town of Sozousa. Deposition of coin finds (as well as hoards) are helpful when reconstructing site formation in the transition between the Roman and Byzantine periods and the Byzantine and early Islamic periods. The geographical



Fig. 2: Apollonia/Sozousa: Field tower (Area AA) at the site immediate hinterland.



Fig. 3: Apollonia/Sozousa: Winepress complexes (Areas AA1) at the site immediate hinterland.

distribution of Byzantine coins in excavated areas inside and outside the medieval walled town is very useful in this respect. While areas of excavations inside the walled town show a continuity in the use of Roman and Byzantine coins (e.g., Areas E and R) or alternatively show predominance for Byzantine and later coins (e.g., Areas T, U and W), those areas located outside the walled town offer a different picture.¹⁸

The coins, unearthed in both Area M (located on the south outside the walled medieval town) and Area O (located on the north outside the walled medieval town), suggest a 4th-century CE expansion of the site. Most coins found in the Byzantine hoard recovered from Area M are dated to the second half of the 4th century CE¹⁹, while the remainder are dated to the 5th, 6th and early 7th centuries CE.²⁰ Among the 15 identifiable coins (out of a total of 34) from Area O, the earliest coin is a 3rd century CE type, followed by two 4th-century CE types.²¹

While Area K (in the east), and Area N (in the southeast), yielded few coins, the recently excavated Area CC in the site's immediate eastern hinterland lends support to this reconstruction. Large-scale excavations in this area yielded over 800 bronze (and one gold) coins. Over 260 identifiable coins were read from Area CC, and the majority of the coins (over 95%) are dated to within the 4th–6th centuries CE, suggesting that use of the area by the site's inhabitants occurred sometime during these centuries. Other recovered finds from all these areas such as fragments of pottery and glass vessels support the chronological evidence, namely occupation from the 4th century CE.



Fig. 4: Apollonia/Sozousa: Built tomb (Area AA3) at the site immediate hinterland.

As to the transition from the Byzantine and early Islamic periods, it may be noted that there is ample evidence for a reduction in the size of Sozousa in the 7th century as evidenced from all excavations areas outside the medieval fortification line – Areas M, O, K, N, as well as in CC. Excavations in these areas, located within the assumed limits of the Byzantine-period town (or right outside them), included large late Byzantine-period refuse pits (centralized town dumps, especially in Areas M, N and CC), providing evidence for the limits of the late Byzantine town, whose area can be estimated at 28 hectares (as stated above).

Pottery, glass and coins found in these dumps suggest that although no evidence of visible destruction by Persian-Sasanian conquerors in 614 CE is attested in Sozousa, many of its inhabitants abandoned the site (or found themselves victims of the invasion). This can be deduced from the fact that very few of the coins discovered in these areas postdate this event, and none of the pottery and glass finds can contradict a date of abandonment in the early 7th century CE.

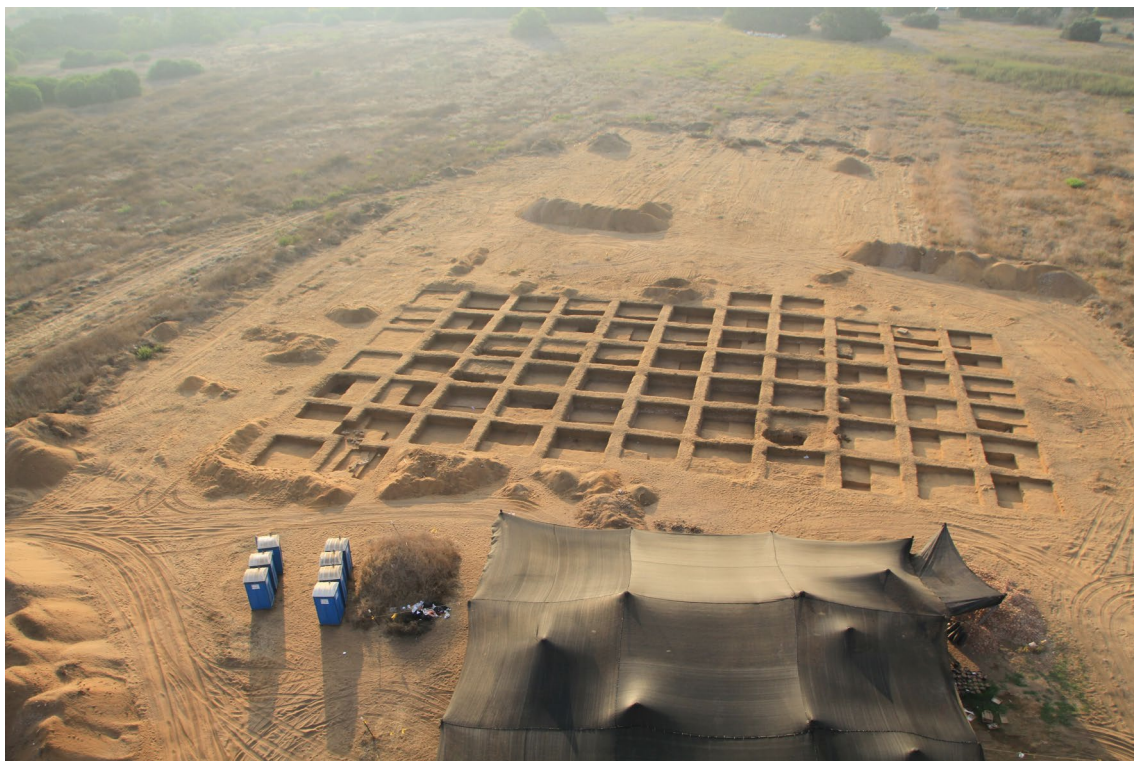


Fig. 5: Apollonia/Sozousa: Town dump (Area CC) at the site immediate hinterland.

Byzantine Immediate Hinterland

Before elaborating on the immediate hinterland of the site, it should be borne in mind that the site periphery was surveyed and excavated quite often due to development works in one of modern Israel's intensively developed regions – the central coastal plain. Earlier surveys were largely assembled in the Map of Herzliyya published in the framework of the Archaeological Survey of Israel.²² Based on this publication, it is known that the Byzantine settlement flourished during the Byzantine period as some 40 sites (including the mother settlement of Apollonia/Sozousa and some necropoleis)²³ were documented by means of surveys and excavations in the less than 10 km² survey map of Herzliyya in which Apollonia/Sozousa forms the north-westernmost site. These sites were distributed throughout the map area – on the coast, on the *kurkar* (fossilized dune sandstone) ridges, in the area of drained marshland and on the *hamra* (red loam) hillocks.²⁴ These site remains comprise wine presses, oil presses, potter's kilns and raw glass furnaces, attesting to the economy of the population. The intensity of the Byzantine settlement at the time probably necessitated deforestation and preparation of land tracts for agricultural cultivation, including the marshlands that are known in the region. Indeed, the 'Herzliyya Marsh'

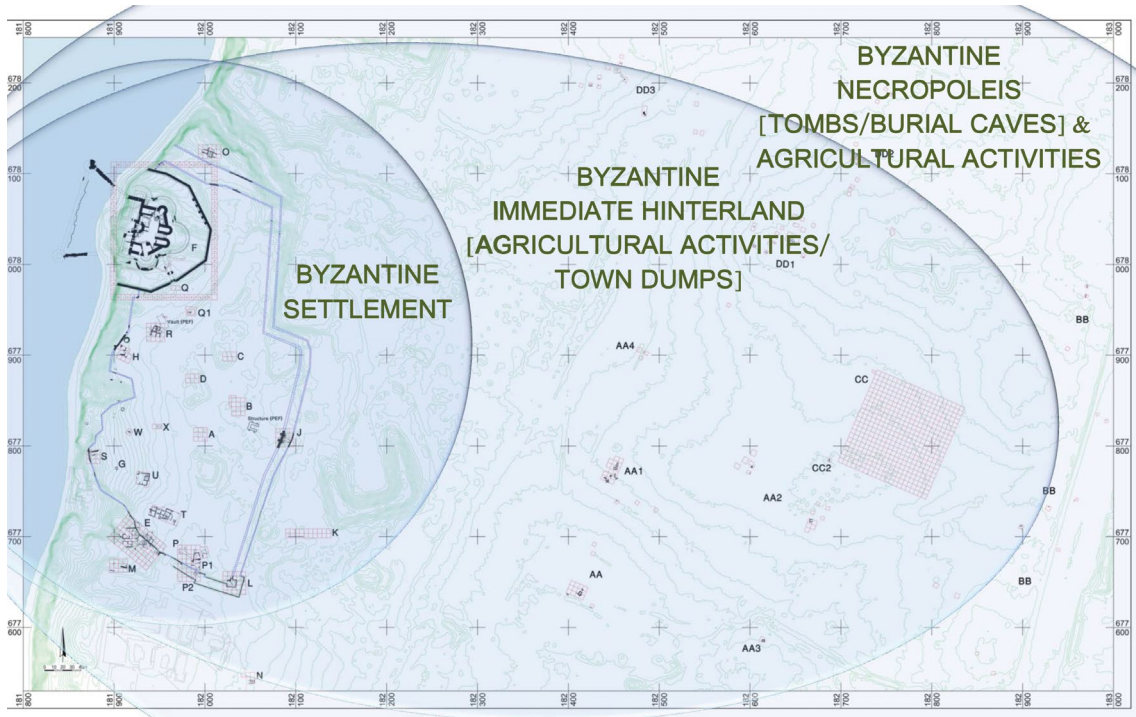


Fig. 6: Apollonia/Sozousa: Site plan with suggested functional ‘belts’.

was drained in an impressive quarrying and construction operation, consisting of a tunnel 200 m long that drained the water to the sea.²⁵

The large-scale excavations at the Byzantine site and especially in its immediate hinterland enabled a higher resolution of its physical division into functional ‘belts’ (fig. 6):

- 1) The Byzantine inhabited settlement, adjacent to the seacoast;
- 2) The Byzantine immediate hinterland, where agricultural activities in the form of field towers and wine presses were uncovered and disposal activities of human and industrial waste were unearthed in the form of town dumps on the edges of the inhabited eastern, northern and southern settlement;
- 3) The Byzantine period necropoleis to the east (tombs and burial caves), where agricultural (and other) activities also took place.²⁶

This suggested functional division is based on the results of many excavations by either Tel Aviv University or the Israel Antiquities Authority in the course of the last four decades. The fact that Byzantine period activity was the most dominant at the site and its hinterland throughout its history encourages investigation into the physical division far beyond its inhabited perimeters.

Elsewhere we have discussed the rural nature of the area to the south of Apollonia-Arsuf on both sides of the Yarqon estuary.²⁷ We tried to show that the rural area between

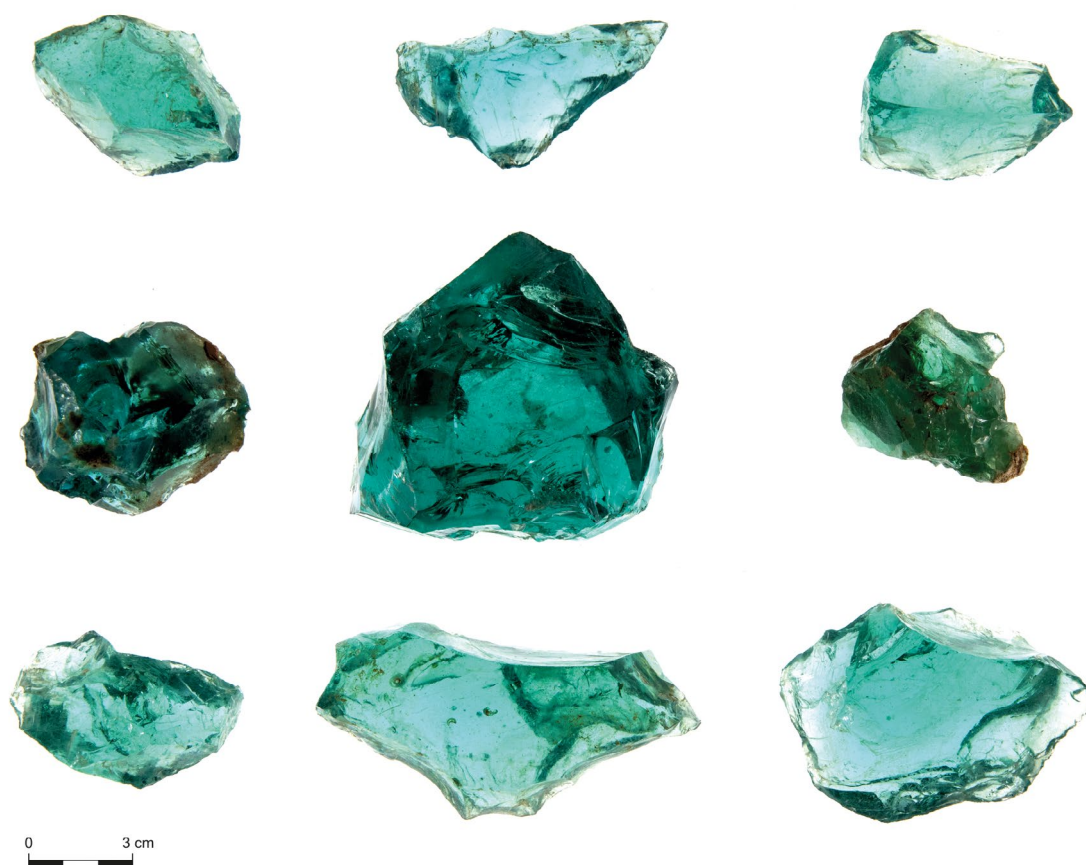


Fig. 7: Apollonia/Sozousa: Selection of raw glass chunks (Area O).

Joppa and Apollonia-Arsuf (i.e., the central coastal plain or Southern Sharon) was heavily occupied by Samaritans (and to a lesser extent by Christians) during the late Roman and Byzantine period. This process probably started sometime after the Second Jewish Revolt and, as the archaeological evidence indicates, accelerated during the 3rd and 4th centuries CE, at a time when quite a few Jewish settlements that had been abandoned in either the late 1st or early 2nd century CE were reoccupied by Samaritans in the form of villages and farms. There were also several Samaritan settlements that had not been previously occupied by Jews. All these Samaritan settlements continued to exist well into the early Islamic period.²⁸ The local settlement pattern, as reflected in the better-known excavated and/or surveyed sites in this region, is composed of small- to medium-sized villages and farms. Many of these settlements existed in their “Byzantine” form until the 8th century CE, when a gradual decrease in their size and population led to near total abandonment in centuries to follow. This change can be related to the increased insecurity and sharp deterioration in the economic conditions of the Samaritans (as well as of the rest of the

dhimmīs [non-Muslims]). This process started with the Abbasid period, in the second half of the 8th century, by means of persecution by the contemporary caliphs and their governors, resulting in local revolts and disasters. Furthermore, at that time, the Muslim authorities prohibited wine drinking, which certainly caused a major economic decline in many settlements where viticulture was a main source of livelihood. Consequently, the number of rural Samaritan settlements was substantially reduced and most of the Samaritans were either concentrated in towns and cities or settled in villages in the mountainous region of Samaria.²⁹ The evidence from the wine press complex discovered in Apollonia-Arsuf (esp. in Areas AA1 and O) shows that a somewhat similar process occurred approximately two centuries earlier. The effects of the persecution of the Samaritans by Justinian are not totally clear in the archaeological record. However, it is possible that the Samaritan viticulture industry was abandoned in the town of Sozousa from this date on and was now concentrated in the rural Samaritan settlements of the region.

Another aspect of the economic life of Byzantine Sozousa relates to the production of raw glass (fig. 7). While evaluating the evidence at hand, it has been suggested in the past that it seems likely that the Church, as the center of political and social power in late Byzantine Sozousa, may have played an important role in the production and circulation of the raw glass produced at the site. There is, however, no direct evidence for such an involvement except for pieces of information on the economic involvement of the Church (as an administrative body) in the daily life of the Byzantine world.³⁰ Private entrepreneurship seems less likely given the massive scale of the production at the site.

The impact of this production at the site is apparent in the following periods of its occupation (and even in the later phases of the Byzantine occupation). Raw glass refuse is used as building materials in the early Islamic and the Crusader period building remains at the site – with the Crusader castle (Area F) being the most significant building project that used raw glass refuse in its construction.

Notes

¹ Flavius Josephus, *Jewish Antiquities* XIII, 395; Pliny the Elder, *Natural History* 5.69; Ptolemy, *Geography* 5.15.2.

² 2.14.2 and 5.7.2, *Itineraria Romana*, ed. by Schnetz, II, 25, 90, and 133.

³ The *Cosmography of Ravenna* was compiled soon after 700 CE from earlier sources that go back to early Byzantine or even Roman times, see Schnetz 1942; Dilke 1985, 174–176.

⁴ *Stephani Byzantii Ethnorum quae supersunt*, ed. by Meineke, p. 106. It is worth noting that in Stephanus Byzantius's text, the name Sozousa (s.v. no. 1, p. 596) is also mentioned (see below) most probably because Stephanus used sources from different periods: one from Roman times when listing *Apollonia*, and a second source from Byzantine times when mentioning *Sozousa*. For Apollonia, see also

Stephani Byzantii Ethnica, I, 228–229.

⁵ Stark 1852, 452 note 5; Clermont-Ganneau 1896, II, 337–339.

⁶ *La prise de Jérusalem*, ed. Garitte, p. 55; *Expugnatio Hierosolymae*, ed. Garitte, 341, pp. 38, 70; 348, p. 131.

⁷ *Acta conciliorum oecumenicorum*, III, ed. Schwartz, pp. 80, 188, and IV, ed. Schwartz, no. 1, p. 221.

⁸ Birnbaum – Ovadiah 1990; Roll 1999, 31. 45.

⁹ Tal forthcoming; see also Tal 2015. It should be emphasized, however, that Abū L-Faḥ reports Samaritan synagogues in villages between Zaytā (north of Ṭūl Karem) and Arsūf, but only a Dosithean (not Samaritan) ‘meeting place’ in Arsuf in the early 9th century long after the Islamic conquest, cf. Levy-Rubin 2002, 69 f.

¹⁰ Peeters 1923–1924, 13; *La prise de Jérusalem*, ed. Garitte, pp. 4, 42; *Expugnatio Hierosolymae*, ed. Garitte 348, pp. 75, 104; see also Schick 1995, 20–25.

¹¹ Schick 1995, 250; for the archaeological evidence cf. Tal – Taxel 2012, 499–501; Tal and Bijovsky 2017; and below.

¹² Flusin 1992, I, 105; II, 339.

¹³ Birnbaum – Ovadiah 1990.

¹⁴ Tal 2015.

¹⁵ Tal 2009.

¹⁶ Tal – Jackson-Tal – Freestone 2004; Freestone – Jackson-Tal – Tal 2008; see also Roll 1999, 7–10.

¹⁷ Pines – Sapir-Hen – Tal 2017.

¹⁸ During 26 seasons of excavations (since 1977) approximately 1250 coins were recovered from the site. To these, approximately 900 coins may be added from excavations carried out in 2012–2013 just to the east of the Apollonia National Park.

¹⁹ Excavations in Area M yielded 42 coins altogether and the 11 4th-century coins in the hoard are the earliest coin finds discovered in the area.

²⁰ Of the 36 identifiable coins found in Area M, only one postdates the recorded Persian-Sasanian occupation of 614 CE – a coin that was minted in Alexandria and is attributed to the later years of Heraclius (632–641 CE).

²¹ The 3rd century CE type is a coin dated to the reign of Gallienus (260–268 CE), while the two 4th century types are coins dated to 305–311, 364–378 CE respectively. The remainder are almost exclusively dated to the 6th century CE. Three tentatively postdate 614 CE based on stylistic considerations: two coins that may be assigned to 624/25 CE and 630–641 CE respectively, and another, as in Area M, assigned to the later years of Heraclius (630–641 CE).

²² Gophna – Ayalon 1998, 13*. See online version in: [http://survey.antiquities.org.il/index_Eng.html#/MapSurvey/21]

²³ For the latter, see Tal 1995; Agmon 2017.

²⁴ For the region geology see Gophna – Ayalon 1998, 8* f.; and more specifically Tal 1999.

²⁵ Gophna – Ayalon 1998, Site 37.

²⁶ Gophna – Ayalon 1998.

²⁷ Tal – Taxel 2010; 2015.

²⁸ Roll – Ayalon 1989, 137–183. 231.

²⁹ See, in this respect, Levy-Rubin 2002, 29–31; Schur 2002. The chronicle of Abū l-Fatḥ (dated to 1355 CE, but referring to the early 7th to early 10th centuries) mentions many Samaritan villages, most of which are identified with places in the northern and central Samaria Hills, though a few others – at least some of which were also Samaritan settlements – are yet unidentified (Levy-Rubin 2002, 183–186, Geographical Appendix).

³⁰ Jones 1964, 830–834, and esp. 894–910.

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References

Agmon 2017

Y. Agmon, Kefar Shemaryahu. Ḥadashot Arkheologiyot—Excavations and Surveys in Israel 129, 2017. [http://www.hadashot-esi.org.il/Report_Detail_Eng.aspx?id=25349&mag_id=125].

Birnbaum – Ovadiah 1990

R. Birnbaum and A. Ovadiah, A Greek Inscription from the Early Byzantine Church at Apollonia, IEJ 40, 1990, 182–191.

Clermont-Ganneau 1896

C. Clermont-Ganneau, Archaeological Researches in Palestine during the Years 1873–1874 2 (London 1896).

Dilke 1985

O. A. W. Dilke, Greek and Roman Maps (London 1985).

Flusin 1992

B. Flusin (ed.), Saint Anastase le Perse et l’histoire de la Palestine au début du VIIe siècle (Paris 1992).

Freestone – Jackson-Tal – Tal 2008

I. C. Freestone, R. E. Jackson-Tal and O. Tal, Raw Glass and the Production of Glass Vessels at Late Byzantine Apollonia-Arsuf, Israel, JGS 50, 2008, 67–80.

Gophna – Ayalon 1998

R. Gophna and E. Ayalon, Archaeological Survey of Israel: Map of Herzliyya (69) (Jerusalem 1998).

Jones 1964

A. H. M. Jones, The Later Roman Empire 284–602: A Social Economic and Administrative Survey, I–II (Oxford 1964).

Levy-Rubin 2002

M. Levy-Rubin, The Continuatio of the Samaritan Chronicle of Abū L-Fatḥ Al-Sāmīrī Al-Danafī, Studies in Late Antiquity and Early Islam 10 (Princeton 2002).

Peeters 1923–1924

P. Peeters, *La Prise de Jérusalem par les Perses*. Mélanges de l'Université Saint Joseph de Beyrouth 9, 1923–1924, 1–42.

Pines – Sapir-Hen – Tal 2017

M. Pines, L. Sapir-Hen and O. Tal, Consumption and Disposal Practices in the Southern Levant in Late Antiquity: Animal Bones from 'Απολλωνία/Σώζουσα's Hinterland as a Case Study. *Zeitschrift des Deutschen Palästina-Vereins* 133/2, 2017, 186–204.

Roll 1999

I. Roll, Introduction: History of the Site, Its Research and Excavations, in: I. Roll – O. Tal, *Apollonia-Arsuf: Final Report of the Excavations*, vol. I: The Persian and Hellenistic Periods (with Appendices on the Chalcolithic and Iron Age II Remains), Monograph Series of the Institute of Archaeology 16 (Tel Aviv 1990) 1–62.

Roll – Ayalon 1989

I. Roll and E. Ayalon, *Apollonia and Southern Sharon: Model of a Coastal City and Its Hinterland* (Tel Aviv 1989) (Hebrew).

Schick 1995

R. Schick, *The Christian Communities of Palestine from Byzantine to Islamic Rule: A Historical and Archaeological Study* (Princeton 1995).

Schnetz 1942

J. Schnetz, Untersuchungen über die Quellen der Cosmographie des anonymen Geographen von Ravenna. *Sitzungsberichte der Bayerischen Akademie der Wissenschaften, Philosophisch-Historische Abteilung* 6, 1942, 1–87.

Schur 2002

N. Schur, Persecutions of Samaritans by the Abbasids and Disappearance of the Samaritan Rural Population, in E. Stern and H. Eshel (eds.), *The Samaritans* (Jerusalem 2002) 587–590 (Hebrew).

Stark 1852

K. B. Stark, *Gaza und die philistäische Küste* (Jena 1852).

Tal 1995

O. Tal, Roman-Byzantine Cemeteries and Tombs around Apollonia. *Tel Aviv* 22, 1995, 107–120.

Tal 1999

O. Tal, The Natural Environment, in: I. Roll – O. Tal, *Apollonia-Arsuf: Final Report of the Excavations*, vol. I: The Persian and Hellenistic Periods (with Appendices on the Chalcolithic and Iron Age II Remains), Monograph Series of the Institute of Archaeology 16 (Tel Aviv 1999) 76–82.

Tal 2009

O. Tal, A Winepress at Apollonia-Arsuf: More Evidence on the Samaritan Presence in Roman-Byzantine Southern Sharon, *Liber Annus* 59, 2009, 319–342.

Tal 2015

O. Tal, A Bilingual Greek-Samaritan Inscription from Apollonia-Arsuf/Sozousa: Yet More Evidence of the Use of εἶς θεὸς μόνος Formula Inscriptions among the Samaritans, *ZPE* 194, 2015, 169–175.

Tal Forthcoming

O. Tal, Apollonia-Arsuf: Final Report of the Excavations. Volume II: Excavations outside the Medieval Town Walls, Monograph Series of the Institute of Archaeology (Tel Aviv).

Tal – Bijovsky 2017

O. Tal and G. Bijovsky, A Hoard of Fourth-Fifth Century CE Copper Coins from Sozousa, *INR* 12, 2017, 147–158.

Tal – Jackson-Tal – Freestone 2004

O. Tal, R. E. Jackson-Tal and I. C. Freestone, New Evidence of the Production of Raw Glass at Late Byzantine Apollonia-Arsuf, Israel, *JGS* 46, 2004, 51–66.

Tal – Taxel 2010

O. Tal and I. Taxel, A Reappraisal of the Archaeological Findings at Tel Ḥashash: On the Archaeology of the Yarqon Estuary from Classical Times to Late Antiquity, *PEQ* 142, 2010, 95–126.

Tal – Taxel 2012

O. Tal and I. Taxel, Socio-Political and Economic Aspects of Refuse Disposal in Late Byzantine and Early Islamic Palestine, in R. Matthews and J. Curtis (eds.), *Proceedings of the 7th International Congress of the Archaeology of the Ancient Near East, 12th–16th April 2010, the British Museum and UCL, London, vol. i: Mega-Cities & Mega-Sites, the Archaeology of Consumption & Disposal, Landscape, Transport & Communication (Wiesbaden 2012)* 497–518.

Tal – Taxel 2015

O. Tal and I. Taxel, Samaritan Cemeteries and Tombs in the Central Coastal Plain: Archaeology and History of the Samaritan Settlement outside Samaria (ca. 300–700 CE), *Ägypten und Altes Testament* 82 (Münster 2015).

Primary Sources

Acta Conciliorum Oecumenicorum, vol. III, ed. by E. Schwartz, *Acta Conciliorum Oecumenicorum*, vol. iii (Berlin: W. de Gruyter, 1940).

Acta Conciliorum Oecumenicorum, vol. IV. *Acta Conciliorum Oecumenicorum*. ed. by J. Straub, *Acta Conciliorum Oecumenicorum*, vol. IV (Berlin: W. de Gruyter, 1971).

Cosmography of Ravenna, ed. by L. Schnetz, *Itineraria Romana*, vol. II: *Ravennatis anonymi cosmographia et Guidonis geographica* (Leipzig: Friderici Nicolai, 1940).

Cyril of Jerusalem, *Catecheses*, trans. by E. S. J. Yarnold, *Cyril of Jerusalem* (London and New York: Routledge, 2000).

Expugnationis Hierosolymae, ed. by G. Garitte, *Expugnationis Hierosolymae A.D. 614*, *Corpus Scriptorum Christianorum Orientalium* 341, *Scriptores Arabici* 27 (Louvain: Secrétariat du Corpus SCO, 1953).

Expugnationis Hierosolymae. ed. by G. Garitte, *Expugnationis Hierosolymae A.D. 614*, *Corpus Scriptorum Christianorum Orientalium* 348, *Scriptores Arabici* 29 (Louvain: Secrétariat du Corpus SCO, 1974).

Flavius Josephus, *Jewish Antiquities*, Books XII–XIII, vol. V, trans. by R. Marcus, LCL 365 (Cambridge, MA.: Harvard University Press, 1980).

La prise de Jérusalem par les Perses en 614, ed. by G. Garitte, *La prise de Jérusalem par les Perses en 614*, *Corpus Scriptorum Christianorum Orientalium* 203, *Scriptores Iberici* 12 (Louvain: Secrétariat du Corpus SCO, 1960).

Life of George of Choziba, ed. by C. House, 'Vita Sancti Georgii Chozibitae auctora Antonino Chozibita', *Analecta Bollandiana*, 7 (1888), 95–144.

Pliny. *Plini Secundi Naturalis Historiae*, vol. I, ed. by C. Mayhoff (Leipzig: Teubner, 1906).

Ptolemy. *Claudii Ptolemaei Geographia*, vol. II, ed. by C. Müller (revised ed. by C. T. Fischer) (Paris: [n.p.], 1901).

Sozomen, *Ecclesiastical History*, trans. by C. D. Hartranft, *The Ecclesiastical History of Sozomen, Comprising a History of the Church from A.D. 323 to A.D. 425* (Buffalo, NY: Christian Literature Publishing Co., 1890).

Stephani Byzantii Ethnica, vol. I, ed. by M. Billerbeck, *Stephani Byzantii Ethnica*, (Berlin and New York: W. de Gruyter, 2006).

Stephani Byzantii Ethnicorum quae supersunt, ed. by A. Meineke, *Stephani Byzantii Ethnicorum quae supersunt* (Berlin: G. Reimer, 1849).