

The Roman Limes in Numidia: Security, Trade, and Frontier Management (198-235 CE)

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Abstract

This study examines the Roman frontier system (limes) in Numidia during the Severan period. Traditionally seen as a military boundary against nomadic incursions, new evidence reveals a broader role. The limes regulated trade, nomadic migration, and access to water and agricultural resources. Military installations were located near water sources, fertile lands, and caravan routes. They supervised Bedouin movements and monitored commercial activity. Frontier posts supported agricultural expansion within the province. The limes facilitated economic integration with neighbouring provinces. It connected Numidia to regional trade networks. The system combined security measures with economic management. Thus, the Severan limes demonstrates a sophisticated approach to frontier administration.

Keywords : Numidia ; Limes ; Economy ; Legion ; Security.

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I- Introduction :

Since the 1960s, our understanding of Numidia's frontier has shifted significantly. This is because experts from various fields, not just historians, began presenting new theories and challenging older ideas that came from traditional classical research. This particular study examines the Numidian province for two key reasons. Firstly, its location in the heart of Roman Africa made it an essential connector between the eastern and western territories, also offering easy access to the Sahara. Secondly, it was established as an administrative province relatively late, in the late second century CE during the Severan period, a time when military campaigns, led by Anicius Faustus, took place in its southern areas from 196 to 200 CE.

Among the provinces in Roman Africa, Numidia stood out for its significant military presence and security. In contrast to other African provinces, Numidia's southern outposts weren't mainly built as defensive fortresses. The people living along this "Maghreb" border were a diverse mix of settled communities and nomadic groups. These nomads would spend their winters at the desert's edge and then move with the seasons in summer to the hills and plains where their herds could find food.

Limes settlements were deliberately chosen close to water sources, areas for grazing, and important trade routes. This research is guided by one main question: What do the chosen locations for military facilities and the extent of troop deployments reveal in southern Numidia (198-235 AD)?

New archaeological findings reveal that the Roman frontier in Numidia was far more than just a defensive line against desert nomads. It operated as a complex system that combined military control, economic regulation, and adjustments to the environment. By overseeing essential resources and managing routes for trade and movement, the border helped settled communities and nomadic groups interact. At the same time, it ensured the province's financial and tactical security. This article draws on both historical documents and archaeological discoveries, comparing them with earlier research to illustrate the many important functions of the Numidian frontier during the Severan period.

I.1. Security Dynamics and Military Strategy in Southern Numidia

Tertullian records that during the reign of Septimius, the Roman military engaged and confined Maures and Gaetulian tribal groups within their territories (Tertullian, *Adversus Iudaeos*, 7). Lasser J-M. proposes two possible dating ranges for this account: either 194-197 CE or 200-206 CE (Lassère, 2015, p. 175). Moreover, a newly discovered epigraphic record, considered the earliest mention of the Bavares tribe, documents a campaign that resulted in the decimation of several Bavares individuals in Mauretania Caesariensis (Drici, 2015, p. 60). This inscription names *Caius Octavius Pudens* as procurator for Septimius Severus, and is dated to 198-199 CE (Benseddik & Laporte, 2016, p. 412).

Following its formalization during the Severan period, Numidia exhibited minimal epigraphic evidence (only two instances) potentially indicating regional instability. These two inscriptions, from *Tfilzi* and

Casae, mention legionary detachments and have been interpreted by some scholars as indicators of persistent insecurity in southern Numidia (Morizot, 1979, p. 312). The *Tfilzi* inscription refers to a (*vexillatio*) described as “*morantes in procinctu*”, interpreted as (prepared for combat and on march) or (in military attire for engagement) (Le Bohec, 1989, p. 42). The *Casae* inscription mentions “*morantes ad fenum sec(andum)*” (*Corpus Inscriptionum Latinarum* [CIL], VIII, 4322 = 18527)

Regardless of the precise interpretation, a scholarly consensus suggests these inscriptions primarily reflect the need for regulating transhumant populations rather than widespread insecurity (Fentress, 1979, p. 109; Morizot, 1979, p. 309; Le Bohec, 1989, p. 418). The *Casae* inscription is thought to denote either the provision of escorts for labourers or the oversight of agricultural harvesting (Fentress, 1979, p. 109; Le Bohec, 1989, p. 425); Fentress even hypothesizes that the soldiers themselves may have been engaged in hay production. The sole instance of an “external” threat stemmed from the western provincial periphery, where Herodian documented encounters with tribal groups along the limes (Herodian, VII, 9). This external pressure could account for the strategic placement of legionary detachments along the Numidian and Mauretanian frontiers

Picard theorizes that the westward tribal menace, emanating from the Ouled Nail mountains, increasingly concerned Roman authorities, particularly the potential for these groups to impact their counterparts in the Aures Mountains (Picard, 1942, p. 183). Consequently, a road was constructed and fortified with defensive outposts, extending south-westward from El Kantara towards the southern borders. This progression involved stages from EL Kantara to Ain Naimia, then to El Gahra, and subsequently to Dimmidi. An inscription may correlate with this strategic initiative, as Picard interpreted the personal presence of *Cornelius Valens*, the governor of Africa, in the region and at the fortress (between 205-208 CE) as a response to an extraordinary, yet non-military, situation. Picard himself proposed that Valens' presence, rather than a campaign, might have aimed to project Roman authority beyond the Dimmidi stronghold towards Qasr al-Faj and al-Aghouat which are the two centers hypothesized by numerous scholars, including Picard himself. (Picard, 1942, pp. 85–86)

I.2. Socio-Demographic Structure of the Limes Zone

Regarding southern Numidia, there is consensus that the populations inhabiting the limes zone comprised both sedentary communities and nomadic Bedouin groups. These latter communities wintered at the desert margins and undertook seasonal migrations during summer towards elevated regions where plains and plateaus offered grazing for their livestock. In the west, bordering the Ouled Nail mountains, Despois identifies two distinct tribal typologies: those to the north of these mountains, characterized as semi-nomadic, migrating to the “Zahrez” and western Hodna plains before returning to their mountain homelands, for a late, occasionally nonexistent, grain harvest. (Despois, 1964, p. 222).

Conversely, to the south, fully nomadic tribes wintered near Oued Jeddi and in palmgrooves, undertaking summer migrations to the northern plains

A phase termed "occupation in depth" by Picard commenced in the initial third of the third century CE, a strategic methodology purportedly adopted by the Romans from their experience in Syria. Picard posits this strategy unfolded in three distinct phases: - first, the eviction and displacement of nomadic Bedouins who periodically raided urban centers in the Gulf of Syrte. Second, the construction of a chain of defensive installations designed to deter nomadic Bedouin incursions from Syrte and the Jafara region, and third, the establishment of control over thoroughfares leading to Ghadames and Fezzan through military outposts such as Bounjem and Si Aoun (Picard, 1942, pp. 55–56). It is notable that these fortifications and encampments, whether in Syria or Numidia, lacked interconnectivity via a comprehensive road network. Fentress contends that, from a strategic standpoint, no direct analogy can be drawn between the two regions, as the distinctive geography of southern Numidia largely dictated its military deployment. Furthermore, she argues that adversaries in the Syrian province exhibited greater dynamism, tenacity, and military acumen compared to their counterparts in southern Numidia (Fentress, 1979, p. 116).

I.3. Economic and administrative/military dimensions

Despois suggested that Roman administrative control and the delineation of frontier zones in North Africa were closely related to climatic conditions (particularly levels of humidity) and to existing patterns of human settlement (Despois, 1942, p. 211). Trouset, however, argues that this traditional interpretation must be reconsidered in light of recent archaeological discoveries in Roman Africa. Nevertheless, he acknowledges that the Severan limes in Mauretania Caesariensis broadly followed the southern limits of the Tell Atlas mountain range and corresponded closely with the 400 mm annual rainfall isohyets, particularly between the regions of Ayoune Sebaa and Grimidi. This level of precipitation is currently regarded as optimal for cereal cultivation (Trouset, 1986, p. 90).

By contrast, the Severan fortifications established in southern Numidia and extending toward southern Tunisia were generally located along the desert margins, in zones receiving significantly lower annual rainfall (approximately 100–150 mm). This situation is particularly evident in the installations located south of the Hodna Mountains, along the axis linking Gemelae, Dimmidi, and Al-Dawsan. Under such arid environmental conditions, the scarcity of water required the development of artificial hydraulic solutions. Consequently, the control and management of water resources became a key strategic concern for the Roman authorities.

Fentresse, further challenges the notion that the construction of frontier fortresses should be interpreted solely as a military undertaking. If these installations were purely defensive, how should one interpret the presence of temples, agricultural fields, and civilian settlements beyond the

fortifications? (Fentress, 1979, p. 124). Such evidence suggests that Roman authorities expected soldiers stationed in remote frontier posts to participate not only in military defence but also in activities that supported the broader economic and cultural objectives of the empire.

The logistical requirements involved in maintaining these garrisons were considerable. As a result, many military installations in Severan Numidia gradually evolved from strictly defensive outposts into important economic centers. The necessity of supplying frontier garrisons encouraged interaction with local populations and stimulated commercial exchanges in these peripheral regions. Moreover, the regular discharge of approximately 800 soldiers every two years often led veterans to invest their accumulated savings locally, establishing agricultural or commercial activities in the areas where they had previously served. (Fentress, 1979, pp. 124–125)

I.4. Evidence of Agricultural Development in the Southern Numidian Frontier Zones

Historical sources, particularly the vivid account provided by Tertullian, suggest that the Severan period “witnessed a profound agricultural transformation in Roman Africa. According to his description, formerly arid lands were brought under cultivation, forests were cleared and converted into farmland, wildlife was gradually replaced by domesticated herds, and new crops were successfully cultivated even in sandy or rocky soils. Wetlands were drained and trees planted in previously unproductive terrain” (Tertullian, *De anima*, 30, 3–4). Although this account reflects developments across the African provinces as a whole, it illustrates the broader agricultural dynamism that also characterized Numidia during this period

This agricultural expansion was partly facilitated by legislative reforms introduced under Emperor Septimius Severus. These measures aimed primarily at strengthening imperial finances and supporting military expenditures (*annona militaris*) which required a significant increase in agricultural production and consequently placed greater demands on local producers (Lassère, 2015, p. 89)

Efforts to develop agriculture within the limes zone included land reclamation and the allocation of land to individuals who had rendered services to the state. Epigraphic evidence indicates that detachments of the Legio III Augusta carried out a systematic land survey between 198 and 201 CE (*L'Année Épigraphique* [AE], 1946, 38). This initiative involved the demarcation of arable land (*agri*) and pasturelands (*pascua*), as well as the development of water sources (*fontes*), particularly in the southern areas near Shott al-Hudna. These lands were subsequently distributed to “designated beneficiaries”.

Another inscription discovered along the banks of Oued al-Malah in the same region indicates that settlers undertook land rehabilitation and agricultural improvements, as documented by Lasser (Lassère, 2015, p. 484). These efforts demonstrate the active role played by both the military and

civilian populations in expanding agricultural production within the frontier regions.

I.5. Frontier Settlements and the Control of Water Resources

Several settlements—including El Gahra and Ain al-Rish—were strategically established near reliable water sources. The first one, in particular, appears to have served primarily an economic rather than a defensive function. Its location near Oued al-Sha'ir facilitated cereal cultivation, as evidenced by the discovery of carbonized barley remains, likely originating from storage facilities destroyed by fire. Archaeological evidence also suggests the development of a civilian settlement outside the main fortress, indicating an expansion of economic activities beyond the traditional Roman grain-producing regions. This expansion was largely intended to supply the military garrisons stationed along the desert frontier. (Lassère, 2015, p. 484)

Similarly, the fortress of Dimmidi overlooks several watercourses, including Wad Demmed, Madas, and Oued Jeddi. These water resources made agricultural activity possible in a region otherwise characterized by pastoralism and seasonal nomadic occupation. An inscription from *Lamasba* further confirms the presence of agricultural activity supported by hydraulic infrastructure. Excavations conducted by Birebent at this site revealed the existence of a sophisticated water system known as *Aqua Claudiana*, designed to provide both potable water and irrigation for agricultural land (Birebent, 1964, pp. 400–401).

VI. Trade Networks and the Economic Role of the Frontier

The Roman administration in southern Numidia appears to have aimed not at territorial expansion but at maintaining strategic oversight over hydrological resources and major communication routes used by pastoral groups and merchant caravans. Consequently, many military installations were deliberately located near water sources, grazing lands, and established caravan routes (Hilali, 2005, p. 3).

Some frontier installations such as those attributed to the commander *Anicius Faustus* near Tripoli were constructed in an imposing architectural style emphasizing monumental scale and visual impact. Fortresses such as Bu Njem and Ghadames have been interpreted by scholars like Goodchild as instruments of imperial communication intended to project Roman authority and civilization (Goodchild, 1950, p. 37). In contrast, smaller installations in Numidia such as Dimmidi, El-Gahra, and Ain al-Rish appear to have served more practical functions. Their relatively small garrisons and modest architectural design suggest that they were not intended as major defensive strongholds but rather as surveillance and administrative posts. Fenterse, for example, argues that the installation at Dimmidi functioned primarily as an observation point overseeing the commercial routes linking the Niger region to Laghouat (Fentress, 1979, p. 116). These routes likely followed the southern foothills of the Saharan Atlas and connected with the provincial capital through the important commercial center of Zarai.

Based on the Zarai inscription and an analysis of tax records which show both local and imported items, as well as varying duties, experts have concluded that a significant east-west trade route existed. This route primarily extended from the Gulf of Syrte westward towards the two Mauretanian provinces (Troussset, 2002, pp.362-365). Within this network, the province of Numidia acted as a vital connection between these areas. Occasionally, this flow of goods might also reverse direction.

Darmon extensively studied this topic, proposing that commercial activity typically followed a northeast-southwest axis. He suggested that Zarai acted as a customs checkpoint, levying taxes on items coming from the limes (Darmon, 1964, pp. 7–23). Furthermore, many goods entering Numidia and neighboring provinces might have originated in northern Numidia, specifically the Collo region, a potential source of purple dye derived from murex shells. This also likely applied to Garum (a fish sauce) and sea sponges harvested from the coasts of Numidia and Mauretania Caesariensis. These coastal areas were geographically much closer to Zarai than alternatives like Djerba or Gabès (Morizot, 1990, p. 161).

During the early Severan era, archaeological findings from the site of Zarai hold particular importance. At this time, the trade regulations connected with the location appear to have been revised, introducing numerous financial benefits. These actions coincided with significant administrative and military reforms, initiated by the commander *Anicius Faustus*, who oversaw the organization of the newly established province of Numidia.

The departure of the military unit previously stationed at Zarai suggests that the original reasons for its presence (specifically surveillance and security) were no longer relevant, with these duties being transferred to the new administrative authorities. Meanwhile, the auxiliary troops attached to the Third Augustan Legion began to spread into the south-eastern part of the Numidian province, moving towards Tripolitania, and also southwest, in the direction of Mauretania Caesariensis. Their mission was to secure commercial pathways and the crossing points used by nomadic groups—not to obstruct them, but rather to support and capitalize on the goods they transported. (Morizot, 1990, p. 163)

In this context, the understanding of the limes seems to have changed significantly. Instead of functioning as a defensive barrier protecting the African regions from the tribes beyond them, it became a method for establishing closer connections with these groups and ensuring the continuous and stable nature of their periodic movements

II- Results and discussion :

During the reign of Septimius Severus, the Roman military engaged Maures, Gaetulians, and Bavares, confining their movements and establishing frontier control (Tertullian, *Adversus Iudaeos*, 7; Drici, 2015; Benseddik & Laporte, 2016). Epigraphic evidence from Tfilzi and Casae indicates that legionary detachments primarily oversaw transhumant

populations rather than responding to widespread insecurity (Morizot, 1979; Fentress, 1979; Le Bohec, 1989). Occasional external threats from the Ouled Nail Mountains prompted the construction of roads and fortified posts from El Kantara to Dimmidi, projecting Roman authority in the region (Picard, 1942).

Populations along the southern Numidian limes included both sedentary communities and nomadic Bedouins, whose seasonal migrations shaped Roman military strategy. The “occupation in depth” approach sought to regulate these movements through defensive installations and control of key routes, though Numidian deployments differed from Syrian examples due to local geography and the relative strength of adversaries (Picard, 1942; Fentress, 1979; Despois, 1964).

Roman frontier fortifications combined military, economic, and administrative functions. Installations were located near water sources and fertile lands, allowing soldiers to participate in agricultural production and support commercial activity (Fentress, 1979; Birebent, 1964; Lassère, 2015). Land surveys and hydraulic projects by Legio III Augusta facilitated settlement and agricultural expansion in southern Numidia between 198 and 201 CE (AE, 1946, 38; Lassère, 2015).

Frontier settlements such as El Gahra, Ain al-Rish, and Dimmidi relied on water management systems to support cereal cultivation, pastoralism, and local trade. Evidence from the *Aqua Claudiana* at *Lamasba* demonstrates sophisticated Roman hydraulic engineering, enabling sustained agricultural productivity in arid regions (Birebent, 1964).

Trade networks were closely linked to frontier military installations, which regulated access to water, grazing, and caravan routes. Sites like Zarai functioned as customs points and commercial hubs, and redeployment of troops ensured supervision of trade and pastoral movement rather than purely defensive objectives (Darmon, 1964; Morizot, 1990; Hilali, 2005).

Overall, the Severan limes in southern Numidia illustrates a multipurpose strategy: military presence, economic development, water control, and population oversight were integrated to maintain Roman authority and facilitate regional stability. Rather than acting solely as a defensive barrier, the frontier served as a framework for interaction with local populations and the regulation of resources and trade.

III- Conclusion:

The frontier system established in Numidia during the Severan period was not simply a defensive barrier separating the Roman provinces from the nomadic populations of the Sahara. Rather, it constituted a complex network of military, economic, and administrative installations designed to regulate mobility, secure vital resources, and integrate frontier regions into the broader imperial economy.

The strategic placement of forts near water sources, caravan routes, and areas suitable for agriculture reveals a deliberate policy aimed at controlling key environmental and economic assets. In this context, frontier installations functioned as surveillance posts, logistical centers, and catalysts for economic development. Agricultural expansion, facilitated by land surveys and hydraulic infrastructure, further strengthened the economic viability of these regions and supported the supply needs of the military garrisons.

Moreover, the frontier played an important role in regulating interactions between sedentary agricultural communities and nomadic groups engaged in seasonal migrations and commercial exchange. Through taxation, customs control, and the supervision of trade routes, the Roman administration was able to transform the frontier into a zone of economic opportunity rather than a rigid line of exclusion.

Ultimately, the Severan limes in Numidia illustrates how Roman frontier policy combined military strategy with economic pragmatism, creating a system that ensured both regional stability and sustained integration of peripheral territories into the imperial framework.

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