

What's beyond the Etruscan bridge?

Analysis and dating of the Vignale plateau

San Giovenale. Results of excavations
conducted by the Swedish Institute
of Classical Studies at Rome and
the Soprintendenza alle Antichità
dell'Etruria Meridionale
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Back cover: Bridge (illustration by R. Holmgren).
Dust jacket: The enigmatic Stone Platform excavated on Vignale in 1959, looking north-west (photograph by C.W. Welin, courtesy of SIR). See p. 183, *Fig. 155*.

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ABSTRACT

Yvonne Backe Forsberg & Richard Holmgren, *San Giovenale VI:2–3. What's beyond the Etruscan bridge? Analysis and dating of the Vignale plateau* (Skrifter utgivna av Svenska Institutet i Rom 4°, 26:6:2–3), Stockholm 2024.

The Etruscan site of San Giovenale has been excavated periodically since 1956. From the beginning the main focus has been the question of settlement remains. However, a fundamental area within the site had still not undergone the inquiry necessary for a complete understanding of the site as a whole. The Vignale plateau, connected to the main site by an Etruscan bridge, was surveyed and partly excavated in 1959–1960, but not published. The Vignale Archaeological Project (VAP) began new investigations in 2006 that aimed to answer the question of “What's beyond the Etruscan bridge?” This publication focuses on the initial investigations of 1959–1960, augmented by new ground- and aerial remote sensing surveys.

The current volume is divided in six chapters. Through an introduction, and geological/topographic and historical/archaeological settings (*Chapters 1–3*), the reader achieves a general understanding of Vignale within a larger framework. The main archaeological studies of various features on the plateau, their function and dating are covered in *Chapter 4*, where Vignale from the Final Bronze Age to medieval times is approached with an emphasis on the Etruscan periods. The study of the latter investigates the connection to Vignale's sister plateau (the Acropolis area), and the plateaus' connection to the surrounding landscape. An intrinsic aspect of Vignale is the association with wine over time. *Chapter 5* therefore elaborates on wild and domesticated vines with emphasis on production, ritual, and material remains, concluding with a summary and synthesis in *Chapter 6*. Two extensive appendices follow, one detailing the material remains and data connected to the southern Bridge Complex, and the other a treatise on the Etruscan awareness of their local mineral salt, alunite.

Keywords: San Giovenale, Vignale, Etruscan, viniculture, viticulture, cisterns, infrastructure, necropolis, remote sensing, LiDAR, aerial, bridge, ram's head, settlement, photography, defence structures, platform, quarry, wine press, alun, alunite

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Like many enthusiasts before us, we were enraptured by the picturesque and mystical Etrurian landscape, and hopeful that we could reveal some of its hidden possessions. Dark and overgrown ravines among sun-drenched plateaus inspired us to follow in the early Swedish excavators' footsteps—while at the same time trying to broaden their initial ideas with up-to-date knowledge, and to explore and document new areas that were previously uninvestigated (*Fig. 1*). The content of this book is in particular a result of the work that was initiated at the Etruscan Bridge Complex, explored by Stig Forsberg among others in the 1960s (*Fig. 2*). As respectively a beloved husband and dear friend to the current authors, he cemented the teamwork that was destined to continue following his unfortunate and early death. Stig's enormous enthusiasm for San Giovenale, and particularly the Etruscan bridge, encouraged us to use the foundations already laid and inspired us to cross the Pietrisco brook. On its other side, shrouded by trees and speculation, awaited anonymous sepulchres and ruined walls beside from unfinished diaries and sketches left in the archives. This was the plateau of Vignale—an unwritten open book.

The opportunity to investigate Vignale arose again in October 1998, when the four Italian architects Angela Bizzarro, Giuseppe, Stefano, and Alessandro Tilia began a new mapping project in San Giovenale. The Italian venture embraced the acropoleis and the surrounding plateaus, including the Etruscan bridge at the Pietrisco brook. The earlier-excavated structures at the northern part of the bridge, then completely covered by vegetation, were partly cleaned. The former director of the Swedish Institute of Classical Studies in Rome, Carl Nylander, informed the present authors of the new situation and the opportunity to restudy the area—this with the prospect of acquiring answers to our specific inquiries. These embraced the bridge, its buildings, and the all-important question of to where the bridge was leading. Permission to start a complementary investigation of the ruined remains at the

northern bridge abutment was granted by the Soprintendenza at the Museo Nazionale Etrusco di Villa Giulia in Rome. On a cold and rainy day in February 1999, we started the study accompanied by our two dearly appreciated friends from Blera, Luciano Santella, archaeological researcher and mayor of Comune di Blera, and the late Rosario Guido, who was then the president of the Università di Consorzio Agrario. Enthusiastically we started to unearth and reinvestigate part of the Bridge Complex, which had been covered by a 2-m-thick clay layer. Based on the results from the 1999 study, the Vignale Archaeological Project (VAP) was initiated together with Ingela M.B. Wiman in 2006. This first field survey began by investigating the southern side of the bridge, following the associated track along the northern slope up to the Vignale plateau. There we started the search for the remains found during the excavations of 1959–1960. As a result of tough restrictions on excavations and of budget limitations, we introduced both new and established remote sensing techniques from our small aircraft. This led to the subsequent field surveys of 2007, 2009, and 2010. Further to the truism that “no one can whistle a symphony—it takes a whole orchestra to play it”, we want to acknowledge our appreciation of this ensemble—individuals that not only made this project happen, but also made it such an enjoyable time spent in the Etruscan heartland.

We owe a debt to a number of persons and institutions who in various ways have supported our launching of the VAP projects over the years. Many thanks go to the former directors of the Swedish Institute of Classical Studies in Rome—Carl Nylander, Anne-Marie Leander-Touati, and Barbro Santillo Frizell, the latter of whom was instrumental in making vital recommendations, productive inputs, and fruitful discussions over numerous dinners. The then director of the Institute Kristian Göransson is thanked for his encouragement while finalizing the manuscript, as is Ulf Hansson, the new director from July 2019 onwards. Particular thanks also go to the staff of the Institute for their backing and support during

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To get an aircraft in the air is one thing, but first you need the machine in question. For this we are endlessly thankful to Hannu Kuisma who not only provided us with wings for the investigations over San Giovenale, in purchasing an aircraft, but who was also a treasured and important team member during every flying session and an excellent aerial photographer. Truly Hannu, our appreciation can never be enough! We are also very grateful for the support of Robin Fjellström for all his knowledge and support in flying, and understanding the enigma of engines and wings. We also needed a place for taking off and landing, and we are therefore likewise indebted to Sabrina Moscatelli for contacting the *Aero club* in the vicinity of San Giovenale that kindly gave us permission in 2007 to use the short tarmac landing strip intended for radio-controlled aircraft. The landing strip was far too short, but an open gate at the end of the runway saved the day! In 2009 we were fortunate to get in contact with the *Aviosuperficie Alituscia scuola di volo* near Vejano, a few kilometres east of San Giovenale, who kindly let us rent a hangar and use the airport's facilities.

Thanks to Åke Malm, the Swedish journalist who mediated the first contact with Nicola Masini and Rosa Lasaponara, researchers from the National Research Council of Italy (CNR) in Potenza and valued contributors to our remote sensing techniques. They generously provided us with a bulky

exclusive thermal imaging (IRT) camera and also made the LiDAR survey possible, which resulted in ground-breaking images and data as presented in our joint articles over the years. Furthermore, they were the key figures in analysing the remote sensing data and in inviting us into the remote sensing community. A new world opened for us, which they kindly shared by welcoming us to conferences, proving excellent co-authors of articles, and partaking in cheerful dinners, while we felt like pioneering aerial explorers in the field.

We will always remember the great hospitality of all our friends—the Santella family with Luciano, Felice, and Mario Galli, the late Rosario Guido, and their co-workers at the Comune di Blera; the many unforgettable get-togethers with the Bleranian elders such as Giuseppe, energizing conversations with dear Massimo and Franca at Bar Paradiso, and the Pacchiarotti brothers and many others as we ate and drank the local wines in their wine cellars. And not least to mention the Boccalini family of La Torretta restaurant—Giuseppe, Rosella, Clemente, and Alessandra and their staff, who always served the best food in a place that became our beloved central hub—where we often had long, stimulating dialogues with Robin Lindemueller, a truly great and inspiring person and author.

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Fig. 2. *The Etruscan Bridge Complex with Stig Forsberg in the foreground (photograph by B. Blomé in 1963, courtesy of SIR).*

string to his bow, Adorno Polidori: both individuals with great knowledge in their respective fields.

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We dedicate this book to the excavators who stepped on the soil before us: Stig Forsberg, Carl Eric Östenberg, Mario del Chiaro, and Frank Brown.

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Yvonne Backe Forsberg & Richard Holmgren

