

# Ethnography and Archaeology in Upland Mediterranean Spain

**Manolo's world:  
Peopling the recent past in  
the Serra de l'Altmirant**

**Neil Christie, Paul Beavitt,  
Josep A. Gisbert Santonja,  
Joan Seguí and  
Maria Victoria Gil Senís**

*with contributions by*

**Josep Castelló, Oliver Creighton  
and Ferran-Lluís Naya i  
Alemany**



# **Ethnography and Archaeology in Upland Mediterranean Spain**

## **Manolo's World: Peopling the Recent Past in the Serra de l'Altmirant**

**Neil Christie, Paul Beavitt,  
Josep A. Gisbert Santonja, Joan Seguí  
and Maria Victoria Gil Senís**

*with contributions by*

**Josep Castelló, Oliver Creighton and  
Ferran-Lluís Naya i Alemany**

**Leicester Archaeology Monograph 12**

**2004**

**School of Archaeology and Ancient History**



**University of  
Leicester**

© Authors and School of Archaeology and Ancient History, University of Leicester, 2004

ISBN 0-9538914-6-1

Published by the School of Archaeology and Ancient History  
University of Leicester  
Leicester  
LE1 7RH  
United Kingdom  
Tel: +44 (0) 116 252 2611; Fax: +44 (0) 116 252 5005

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior permission.

Designed and typeset by Dr Neil Christie, School of Archaeology and Ancient History, University of Leicester, and reproduced by the Reprographic Unit, University of Leicester. Cover designed by Chris Ward, Graphics Studio, University of Leicester. Cover (front and rear) pictures by Paul Beavitt

**ETHNOGRAPHY AND ARCHAEOLOGY IN  
THE SERRA DE L'ALTMIRANT**

**MANOLO'S WORLD:  
PEOPLING THE RECENT PAST IN UPLAND MEDITERRANEAN SPAIN**

**CONTENTS**

<b>LIST OF PLATES.....</b>	<b><i>i</i></b>
----------------------------	-----------------

<b>LIST OF FIGURES.....</b>	<b><i>v</i></b>
-----------------------------	-----------------

<b>PREFACE AND INTRODUCTION.....</b>	<b><i>vii</i></b>
--------------------------------------	-------------------

<b>ACKNOWLEDGEMENTS.....</b>	<b><i>xi</i></b>
------------------------------	------------------

**PART I: CONTEXT**

1.1 Aims of Project: Geographical Scope ( <i>NC, PB, JAG</i> ).....	<i>1</i>
1.2 Methodology of Study ( <i>NC, PB, JAG</i> ).....	<i>2</i>
1.3 Documentary and Historical Settings ( <i>JAG</i> ).....	<i>8</i>
1.4 Geology and Geomorphology ( <i>MVGS</i> ).....	<i>17</i>

**PART II: LANDSCAPES AND STRUCTURES**

2.1 Structures in the Landscape: Typological Analysis ( <i>NC</i> ).....	<i>23</i>
2.2 Synthesis of Structural Data for Plà de La Llacuna ( <i>NC, PB, JAG</i> ).....	<i>25</i>
2.3 Corrals, Farms and the La Llacuna Landscape ( <i>MVGS</i> ).....	<i>27</i>
2.4 Case-Study I: LL E - The Manolo Residence ( <i>PB, JS</i> ).....	<i>31</i>
2.5 Synthesis of Structural Data for Vall de Gallinera ( <i>NC, PB, JAG, JS</i> ).....	<i>36</i>
2.6 Corrals, Farms and the Vall de Gallinera Landscape ( <i>MVGS</i> ).....	<i>42</i>
2.7 Case-Study II: VG4 - Building and Land Use ( <i>NC, O.Creighton, JS</i> ).....	<i>44</i>
2.8 Case-Study III: VG16 ( <i>NC</i> ).....	<i>45</i>
2.9 Communications across the Landscape ( <i>PB</i> ).....	<i>48</i>
2.10 Corrals and the Rural Architecture of the Valencian Region: Forms and Construction ( <i>JAG</i> ).....	<i>54</i>
2.11 Comparative Study: Structures of the Famorca District ( <i>JS</i> ).....	<i>66</i>
2.12 Comparative Study: The Ethnoarchaeology of Corral Abandonment in the Famorca District ( <i>JS, OC</i> ).....	<i>69</i>
2.13 Discussion: Forms, Functions, Material Cultures and Names ( <i>NC, PB, JS</i> ).....	<i>73</i>

## PART III: FIELD SURVEY RESULTS

3.1 Introduction ( <i>NC</i> ).....	81
3.2 Extensive Survey ( <i>Ferran Naya, JAG</i> ).....	81
3.3 Terrace Wall Studies: Soil, Water, Labour, Dates ( <i>NC</i> ).....	84
3.4 Fieldwalking in Plà de la Llacuna: Methods and Zones ( <i>NC, JAG</i> ).....	90
3.5 Survey Results and Chronologies ( <i>JAG, NC</i> ).....	97

## PART IV: ETHNOGRAPHY - PEOPLE, ANIMALS AND CROPS

4.1 The Ethnographic Survey: Modern Farming and Pastoralism in the Serra de l'Altmirant ( <i>JS, PB, FN</i> ).....	103
4.2 Manolo's World and Perspectives ( <i>JS, PB</i> ).....	112

## PART V: SYNTHESIS AND DISCUSSION

5.1 Discussion I: Marginality and the Serra de l'Altmirant ( <i>NC, JS, PB</i> ).....	115
5.2 Discussion II: Prehistoric to Medieval Activity ( <i>JAG, NC</i> ).....	120
5.3 Discussion III: Landscapes of Change in the Early Modern Serra de l'Altmirant ( <i>NC, JAG, JS, PB</i> ) .....	122
5.4 Discussion IV: The Role of Ethnoarchaeology ( <i>JS, PB</i> ) .....	126
5.5 Conclusions: Peopling Manolo's World ( <i>PB, NC, JAG, JS, MVGS</i> ).....	127
5.6 Endnote.....	129

## PART VI: GAZETTEERS

6.1 Gazetteer of Surveyed Sites in Plà de La Llacuna ( <i>PB, NC, JAG</i> ).....	133
6.2 Gazetteer of Surveyed Sites in Vall de Gallinera ( <i>PB, NC, JAG</i> ).....	145

BIBLIOGRAPHY.....	189
-------------------	-----



## LIST OF PLATES

*Photographs are by P. Beavitt and N.Christie, unless where indicated. (JAG = Josep Gisbert)*

Cover Plate	Manolo with dog and supplies setting out with sheep in the Plà de la Llacuna
Plate 1a	The spectacular natural and human landscape in the Valle de Gallinera – ridge farm and slope terraces amidst limestone bedrock and tumble and Mediterranean scrub
Plate 1b	The more manufactured landscape of the Plà de la Llacuna
Plate 2	Manolo being interviewed by Joan Seguí in his corral's main byre
Plate 3	VG19, one of the many abandoned corrals in the Serra de l'Altmirant, set against the spectacular backdrop of the Gallinera valley
Plate 4	Project co-directors Pepe Gisbert and Paul Beavitt with framing fig tree outside the Manolo corral
Plate 5	The bulk of the 1994 team gathered in the Plà de la Llacuna
Plate 6	The 1995 crew take shelter in a cave in the Famorca district
Plate 7	Satellite photograph of the La Safor – Serra de l'Altmirant ; Villalonga and the north-east entry to the Plà de la Llacuna lies towards the top right of the image
Plate 8	Survey methodologies included elevation drawing of selected extant structures (here, VG5)
Plate 9	Each building was studied and internal layouts recorded and photographed (here Joan Seguí is in House VG30)
Plate 10	Ruinous and field features such as here at VG34 were recorded using proforma sheets and all sites photographed and sketched
Plate 11	Selected sites such as VG4 were surveyed in wider detail by EDM/Total Station
Plate 12	The survey included fieldwalking of cultivated spaces and terraces in both La Llacuna and where feasible in the Gallinera (as in the partially active terraced fields around VG4)
Plate 13	Some of the 1997 survey team in search of the next buried building or cistern!
Plate 14	The outskirts of Benidorm, showing even further expansion of the city for tourist hotels and offices – still pulling in workers from rural sites
Plate 15	One of the crude new buildings imposed on the Llacuna land, which frequently remain only half complete
Plate 16	View north-eastwards, towards Villalonga across the Plà de la Llacuna. Homes concentrate along the line of the tarmac road. The terrarossa soil is much evident in the foreground
Plate 17	View from the Tossalet de Llamp towards the Vall de Gallinera. The main track runs through the central part of the image
Plate 18	Landscape setting of VG4, showing positioning at junction between heights; traces of terraces are evident on the slopes to the right
Plate 19	Aerial view of the site and environs of VG4 showing main dirt track and isolated active terraces and residual defunct terracing. Key are the etched lines on the surrounding hillslopes of recent failed efforts at reafforestation (IGN Vuelo Nacional, HMN 795, Pasada G. October 1985, nos. 19-20, scale 1:18,000)
Plate 20	A flock gathers at the Bassa or lakelet of the Pla de la Llacuna, the sole permanent waterhole
Plate 21	Joan Seguí interviewing Manolo regarding his flock and his market strategies, and the evolution and functions of his residence and stores
Plate 22	Corral del Vidre – Manolo's Corral (LL E). Viewed from north west to the partially ruinous old component with adjoining garage block

- Plate 23 Manolo's corral (LL E), viewed from north east, with stacks of orange boxes and building materials outside; the main entrance to the residential block lies on the left of the photograph
- Plate 24 Manolo's corral with active modern roofed storage space at south-east corner
- Plate 25 Manolo's corral with ruinous east end displaying partial roof and arched entry to the southern enclosure space
- Plate 26 Remnants of a saddle; decaying where it has long lain in the redundant sector of Manolo's corral
- Plate 27 Joan Segui alongside some of the partially redundant/discarded agricultural and animal 'furniture' to the immediate west of Manolo's corral
- Plate 28 The elegant 'Manolo's Dog Residence' with residual potato!
- Plate 29 Single-roomed store structure VG55
- Plate 30 Cistern VG5a of Type D1
- Plate 31 The small shelter VG58, built into a natural opening in the bedrock shelf
- Plate 32 The possible pre-medieval enclosure site of VG8
- Plate 33 Photographic mosaic of VG4 and setting, looking west-north-west towards cultivated field H
- Plate 34 View towards residual cultivated fields west of VG4
- Plate 35 Construction detail of section of west wall of VG4, south end
- Plate 36 View of VG36 – note stepped entry to upper floor residential/storage space
- Plate 37 VG16 corral structure with detail of remnant tile roofing (sloping to north façade); looking westwards from the top of the enclosure wall across to VG15 and its network of slope terraces. Recording work with 1997 students Alice Robinson and Giovanna Pizziolo
- Plate 38 One of the buildings of the abandoned Cairola settlement in the Vall d'Ebo (Photo: JAG)
- Plate 39 Corral in the abandoned Sorell (Puntal del Moro) site in the Pego district (Photo: JAG)
- Plate 40 Wall of a Moorish building, of fifteenth- or sixteenth-century build (Photo: JAG)
- Plate 41 Detail of the arched entry of the Moorish corral at Sorell (Puntal del Moro) (Photo: JAG)
- Plate 42 Manolo's corral – Corral del Vidre (LL E): entry with rounded pointed arch. Note also the patchwork construction and repair work to the doorway
- Plate 43 View from south of the Corral del Tio Joaquim (LL EE) amidst maintained olive terraces
- Plate 44 Interior of the Corral del Tio Joaquim, with view towards pen from west room
- Plate 45 Corral del Tio Joaquim (LL EE): revised main entrance (Phase II) with distinctive arch
- Plate 46 The façade of the 'Clock House', Oliva (Photo: JAG)
- Plate 47 The 'Clock House', Oliva: detail of the sundial with inscribed date of AD 1834 (Photo: JAG)
- Plate 48 The 'Clock House' complex from the nearby hill (Photo: JAG)
- Plate 49 VG4 – Corral de la Serreta de Baix from south showing enclosure and internal walls
- Plate 50 Corral de la Serreta de Baix: the vertical aperture above the cistern VG4b
- Plate 51 VG17, viewed from the main roadway, with corral/enclosure to rear; note internal rendering
- Plate 52 The slot window or embrasure from which VG17 ('Casa de l'Espitllera') takes its name
- Plate 53 VG33, a house (5.1 x 3m) without attached enclosure. Typically, the roof slopes to the south-facing façade. An oven/chimney is set in the north angle of the house, but no partitions are present. A wood-bamboo ceiling is topped by a tiled roof – the survival of which indicates relatively recent redundancy
- Plate 54 VG29 cistern with flat-vaulted roofing; note the large lintel and raised lipstone
- Plate 55 Cistern VG27 with domed vault and predominantly drystone construction. Unusually for the Gallinera zone the cistern was dry. This cistern lies some distance from the nearest building (VG28)
- Plate 56 Concreted trough at VG4b (adjoining the corral to its immediate west)
- Plate 57 Face of cistern VG38; note materials and the former grilled access point
- Plate 58 The substantial Ice House associated with Corral del Tio Joaquim (LL E)

- Plate 59 Corral decay - here, in Corral LL A, roof collapse has meant the accumulation of broken tile across the room floor. In some instances, complete tiles may have been removed for reuse following such abandonment
- Plate 60 House VG1 viewed from the east showing partial decay but with modern breeze blocks in dump in foreground as indication of recent maintenance efforts in the western unit
- Plate 61 Interior of western house of VG1 showing the rudimentary domestic debris indicating only episodic usage of the space for hunting/storage
- Plate 62 Cistern VG1b and its associated hollowed rock basin-troughs
- Plate 63 View along one of the terrace walls of the abandoned cultivation zone at VG13
- Plate 64 One of the refurbished farms and equivalent corrals in the Rascino plateau of the Cicolano region (Lazio province) of central Apenninic Italy – these scattered units with high stock enclosure wall belong chiefly to the later nineteenth century
- Plate 65 View towards one farmhouse on the Rascino plateau; note the high-walled animal enclosure
- Plate 66 A presumed typical roofing arrangement of farmhouse in the study zone with part-shaped irregular trunk beams topped by canes over which are lain the roof tiles
- Plate 67 Interior of VG30 showing double-leaf door
- Plate 68 VG1 interior displaying the spartan and rather *ad hoc* nature of furniture and fittings; comfort is not an obvious requirement here
- Plate 69 Long redundant foldable metal bed in the abandoned enclosure of VG17
- Plate 70 Modern store addition to Manolo's corral
- Plate 71 Extensive Survey site SA IX: sheep enclosure. Viewed from east
- Plate 72 View north-eastwards down to the terraces and clay extraction areas (with flint finds INV. 6016) close to the lakelet or Bassa in La Llacuna. Note how the terraces and field boundaries in the central zone are dictated by the roadway
- Plate 73 VG14 with extensive associated slope terraces, many of narrow dimensions, set out in claw-like fashion. A few trees remain in the greener soil pockets to denote the cultivation
- Plate 74 View towards corral VG7 across upper section of *parat* terracing; although damaged by recent fire, the presence of the burnt bushes highlight the fertile soil caught within the terraced spaces
- Plate 75 Terracing exploiting the water catchment of slopes into a torrent bed north/north east of VG4
- Plate 76 Small wheatfield with burnt trees/bushes located in immediate vicinity of shelters VG35a and b – a field planted for the benefit of birds and hunters. In the distance downslope is corral VG17
- Plate 77 Drawn section of terrace wall dividing fields 5 and 6 in fieldwalked zone of Plà de la Llacuna. Viewed from east
- Plate 78 Drawn section of terrace wall dividing fields 7 and 9 in fieldwalked zone of Plà de la Llacuna. Viewed from east
- Plate 79 Drawn section of terrace wall A in Field/Area G of VG4. Corral de la Serreta Baix
- Plate 80 Arrowheads recovered from the Foia Fonda zone, datable to the early Epipalaeolithic (c. 9000 BC) (Ext. Survey site 33)
- Plate 81 Flock grazing near VG4; the shepherd monitors the flock in the orchard
- Plate 82 Milking goats in La Llacuna in the early morning, prior to cheese-making
- Plate 83 Flock belonging to Manolo outside the active corral VG2 – the latter recently repaired by the farmer owner to work with Manolo and thereby to obtain manure
- Plate 84 Goat grazing on abandoned terrace edges in La Llacuna in the late afternoon. It would not then be milked until early the next morning
- Plate 85 Shepherd displaying an *Ovella roja* lamb
- Plate 86 Two of Manolo's nearest modern neighbours – houses K and M – with architecture more in keeping with coastal residences than with upland farms
- Plate 87 In contrast with his (weekend) neighbours, Manolo's corral avoids aesthetic charm, typified in the highly functional façade architecture and adjoining materials
- Plate 88 Manolo setting off from the Plà de la Llacuna with flock and provisions in the early daybreak

- Plate 89 VG4 nestled against a rock-strewn slope with scrub and little/no tree cover
- Plate 90 View of VG3 store – in the background the hillslope shows the failed efforts to reforest the stony landscape
- Plate 91 One of the unwanted faces of opening up access to car traffic through extending the tarmac roadway across the Serra; this burnt out vehicle lay just off the road at the foot of the Tossalet del Llamp
- Plate 92 Dry-stone shepherd's shelter on the slopes of the Tossalet del Llamp – functional space blended into the natural landscape
- Plate 93 History and fun at Terra Mítica with the 'Barbarroja' ([www.terramiticapark.com](http://www.terramiticapark.com))

# LIST OF FIGURES

- Figure 1 Location map of survey zones in eastern Spain, noting also the regional Villalonga-Gallinera municipal boundary
- Figure 2 Proforma structure record sheet employed in the Serra de l'Altmirant Survey
- Figure 3 Distribution map of known Iron Age/Iberian to Roman sites and roads in the Valencia – Denya region
- Figure 4 Distribution map of Islamic-period sites and towns and routeways in the Valencia – Denya region
- Figure 5 Schematic map of principal geological characteristics of the study zone between the Serpis and Gallinera valleys and between the towns of Lorxa/Lorcha and Oliva
- Figure 6 GIS terrain model of 1994, offering a clear vision of the nature of the steep and rugged topography of the Survey Zone
- Figure 7 Schematic plans of a selection of corrals in the study zone to demonstrate the range of structural forms identified. Shaded areas represent roofed and human spaces; arrows indicate doors, gateways or access points
- Figure 8 Distribution map of sites and site types recorded in the survey zone
- Figure 9 Plà de la Llacuna: pie chart of structure types
- Figure 10 Plà de la Llacuna: pie chart of corral types
- Figure 11 Vall de Gallinera: pie chart of structure types
- Figure 12 Vall de Gallinera: pie chart of corral types
- Figure 13 Vall de Gallinera: pie chart of structure B types
- Figure 14 Vall de Gallinera: pie chart of structure C types
- Figure 15 Drainage basins of corrals LL A, B, E and EE in the Plà de la Llacuna
- Figure 16 Detailed and interpretative plan of Manolo's corral (LL E) in Plà de la Llacuna
- Figure 17 Pie chart showing percentages of building orientations in La Llacuna
- Figure 18 Pie chart showing percentages of building orientations in Vall de Gallinera
- Figure 19 Pie chart showing percentages of door facing choices in La Llacuna
- Figure 20 Pie chart showing percentages of door facing choices in Vall de Gallinera
- Figure 21 Pie chart showing direction of roofslope in La Llacuna buildings
- Figure 22 Pie chart showing direction of roof slope in Vall de Gallinera buildings
- Figure 23 Drainage basins and slope locations of Corrals VG10 and VG4
- Figure 24 Schematic stratigraphic cross-section of quarry at Corral VG4
- Figure 25 Drainage basins and slope locations of Corrals VG5 and VG15
- Figure 26 Drainage basin and slope location of Corral VG1
- Figure 27 Total station survey plan of Corral VG4 with cisterns and related terrace systems
- Figures 28, 29 Phase plans of VG4 – Corral de la Serreta de Baix
- Figure 30 Selected elevation drawing for sections of VG4
- Figure 31 Numbering of walls for VG4 planning and drawing
- Figure 32 1899 map (redrawn and simplified ) of study zone showing positions of recorded corrals and other structures and highlighting noted access lines (tracks and paths)
- Figure 33 1946/50 map (redrawn and simplified) of study zone showing positions of recorded corrals and other structures and highlighting noted access lines (tracks and paths)
- Figures 34, 35 The variations in plan (single-phased and evolved) of livestock enclosure corrals in central and eastern Spain, including bee-hive type shepherd huts with drystone pens (from Garcia Lisón & Zaragoza 1983)
- Figure 36 Plan of the Moorish settlement of Atzuvietà in the Vall d'Alcalà (JAG after Ivars)
- Figure 37 Simplified plan of Corral del Vidre (Manolo's Corral - LL E)
- Figure 38 Corral del Tio Joaquim (LL E): overall composite plan (top) and presumed Phases I and II

- Figure 39 Axonometric perspective reconstruction of the 'Clock House' (Casa del Rellotge). 1: Phase I (construction phase); 2: Phase II (remodelling) (Drawing by M. Ortola Guinnot)
- Figure 40 Location map of the Famorca and Fageca districts in the Valenciana (Seguí 1999)
- Figure 41 Basic typology of pastoral sites in the Famorca and Fageca districts: A – Corrals; B – Rock Shelters; C – Esbardals or drystone open enclosures (Seguí 1999)
- Figure 42 Famorca district: percentages of artifact types in abandoned/ part active/ active corral contexts (from Creighton & Seguí 1998)
- Figure 43 Distribution plot of all corrals and related and unrelated cisterns in the Serra de l'Altmirant survey zone
- Figure 44 Contour map showing sites identified in Extensive Survey
- Figure 45 Schematic image of torrent (*rambla*) terrace system (*parat*) in Vall de Gallinera
- Figure 46 Total station plot of terrace walls near and directly associated with Corrals LL A and B
- Figure 47 Total station survey of terrace walls associated with VG1; note curvature of south group to follow slope contours
- Figure 48 Elevations of selected terrace walls in fieldwalked area of the Plà de la Llacuna
- Figure 49 Elevations of selected terrace walls in fields associated with VG4
- Figure 50 Planning and analysis flow chart used for the Serra de Tramuntana terrace mapping project on Majorca (after Alomar *et al.* 2000a: 79)
- Figure 51 Plà de la Llacuna: fields north and east of the lakelet showing units (nos. 1-21) fieldwalked in 1994 and modern houses and tracks
- Figure 52 Proforma Fieldwalking Recording Sheet used for 1994 fieldwalking in the Plà de la Llacuna
- Figure 53 The principal types of post-medieval and early modern ceramic vessels (drinking, cooking, storage) from the Gallinera zone (after Gisbert & Blanco Vazquez 1997)
- Figure 54 Key Palaeolithic or Epipalaeolithic (c. 9000-8000 BC) flint finds from Extensive Survey Site 38 = INVJA 6016 – from clay/terrarosa extraction site east of the lakelet of Bassa de la Llacuna
- Figure 55 Summary calendar of pastoralist year (from Seguí 1999)
- Figure 56a Mortality models for sheep flocks in the 1994 and 1995 seasons (from Seguí 1995)
- Figure 56b Chart denoting the percentages of mortality by sex for flock of 170 sheep in 1994-95 (from Seguí 1995)
- Figure 57 The corral as a manure factory: materials and usage, input and output (adapted from Seguí 1999)
- Figure 58 Mortality model of *cabra valenciana* goat flock (from Seguí 1995)
- Figure 59 Schematic flow chart by Victoria Gil of the impact of natural and of human erosion on the Gallinera upland landscape and the relationships between workers and the landscape
- Figure 60 Distribution map of all sites recorded in study zone
- Figure 61 Distribution map of all corrals and cisterns in study zone
- Figure 62 Plot of buildings (new and old/recorded) in the Plà de la Llacuna



## PREFACE AND INTRODUCTION

Manolo (see cover photo) is the last resident working shepherd and farmer in the upland district of La Llacuna in eastern Spain, in a space now progressively being eaten away by modern holiday colonisation. His is a rough and ready looking farm, old limestone and new (but weathered) breeze block combined, with a flock of 40 sheep sheltered inside the pen forming the central unit of his farmstead or corral (see *Section 2.4*; pls.2, 21-26). This building blends well into the landscape, in contrast with the white-washed, metalled, corrugated or breeze/concrete block houses now dotted around the basin and slopes of the mountain-girded basin. Manolo's farm seems distant from these new houses, but it also seems a million miles away from the towering tourist apartments and heady nightlife of Benidorm a mere 40km away direct (pl.14). Manolo's farm is not in truth an alien relic untouched by the present: his radio blares away, he has his cigarettes, and he even has a small solar panel on his roof for electricity – but there is enough of the past in his form and farm to stand out.

The Serra de l'Altmirant Survey Project has aimed to contribute to extending knowledge of a little studied area and period in an upland district of central eastern Spain (figs.1, 8). Though in sight of the coast and the lush orange, olive and almond groves of the coastal plain between Alicante and Valencia (and with the fine flesh of the oranges more than adequate testimony to the fertility of the plain!), the inland zones of La Safor are rapidly mountainous and with settlement and cultivation strongly linked to the valleys and their immediate slopes. Yet the uppermost slopes, the plateaus and the watersheds between these upland areas are equally part of the human landscape of eastern Spain: they feature old villages, far less transformed than the coastal settlements through tourism, occasional Islamic and later castles, smaller working farms, plus ruinous farms, enclosures and terraces, and the occasional shepherd. The image to be reconstructed is one of a fairly busy and working landscape, with various small plots worked by villagers and

farmers, and with a greater frequency of shepherding and local, vertical transhumance (see *Part IV*).

But this working past has been much eroded and obscured, and indeed, many old farms and storage structures are now in zones reverting to nature, walls and terraces re-colonised by scrub. Yet this fragmented past is now coming under threat also by human colonisation and exploitation: in our study area, the lower zone, the Plà de la Llacuna (or La Llacuna), easily reached by a tarmac road from the township of Villalonga, has witnessed in the last decade or so a spawning of numerous houses, chalets, villetes, stores, mainly for holiday/weekend use by local families, but with some also geared for land use, indicated by terraced fields chiefly containing almond trees but with some olive groves and varied vegetable patches (see pls.1b, 12). These farm units are clearly being slowly ousted by holiday houses, few of constructional and architectural quality (pls.15, 86). As a result various of the oldest structures lie wholly abandoned, ready for demolition. Elsewhere in the zone there is quarrying for limestone, there is clay extraction, and also removal of the rich terrarossa soil; in places this is of up to 10m depth, and as detailed below (see *Section 1.4*) it contains evidence of palaeolithic activity – unchecked exploitation will remove more of this important archaeology. Meanwhile, electricity and telephone lines, and the all-essential satellite dishes, have begun to make a mark on the skylines. By AD 2000, two restaurants had appeared at the eastern end of La Llacuna.

The tarmac road currently reaches as far as the small lake/water hole: the rough track with exposed stones and boulders for the present limits much further modern expansion, although this will undoubtedly progress soon (see *Section 5.1*). The track in fact eases and then follows up the northern flanks of the Tossalet de Llamp and Serra de l'Altmirant to emerge on the high watershed (c. 606m) and turns south-westwards to run through the exposed plateau running down



*Pl. 1a (above): The spectacular natural and human landscape in the Vall de Gallinera – ridge farm and slope terraces amidst limestone bedrock and tumble and Mediterranean scrub*



*Pl. 1b (right): The more manufactured landscape of the Pla de la Lluçana*

*Pl. 2 (below): Manolo being interviewed by Joan Seguí in his corral's main byre*



to the Vall de Gallinera (pls.1a, 17). Here settlement is extremely limited and the landscape seemingly dominated by scrub: there are occasional pockets of terraced cultivation, but working farms are few and far between before the contours fall to the 500m and then 400m level and the tarmac road resumes, running down to the valley villages and townships of Benisili, Patró, Beniali and La Carrocha and then twisting between olives and almond groves bordered by well tended terraces (see map, figs.1, 8).

The structures and terraces that lie ruinous or only in part maintained on the Gallinera side do not present any great antiquity. Indeed, they are in many instances units belonging at most to the earlier part of the last century and denote colonising efforts by farmers and shepherds deriving from the Gallinera villages. Some structures belong to the eighteenth and nineteenth centuries, although very few have any related documentation. Their locations relate to a pre-mechanised era and to one when tracks for people, donkeys, sheep and goat followed north-south flowing torrent beds: the modern roadway, for ease of vehicular use, ignores many of the older structures. For the La Llacuna zone much of this pre-modern past has already been obscured; for the Gallinera zone there is still time and scope to investigate and study these remnants. As noted, this is not a distant past, and yet even to locals, much has been forgotten. The Gallinera zone has itself been threatened in recent times: the slopes, extending up to the crests of the Costeres de la Solana and the Serra de l'Altmirant, bear the scars of a largely failed attempt at forestation with pine trees. The logistics of transporting and manoeuvring a small mechanical digger, gouging out boulders in digging out large numbers of straight channels down the slopes are hard to imagine, but no doubt the work kept a few locals well paid! The massive landscape effects of the abortive project are clearly visible on air photographs (pl.19).

The structures and their associated wells and fields provide a window into this past and a chance to record it before concrete, breeze blocks and tarmac – and tourists – remove it. Building types need not have evolved dramatically since medieval times or even earlier – these structures may thus also provide an indication of a much more distant landscape. Building survey, field walking, extensive survey, geomorphological analysis and GIS plotting were methods adopted

on the Serra de l'Altmirant Survey in order to map this disappearing past (*Parts II and III*); equally importantly, ethnographic survey was fully employed in order to document both structures and people, to ask how people used and viewed these buildings and their context, and to identify also how far modern practice, notably in terms of transhumance, reflects the pre-modern systems (*Part IV*).

The staff involved in this Survey chose to tackle these problems for a variety of reasons. Josep Gisbert, as head of the Museu Arqueològic of the city of Denia, has long promoted greater interest in local history and ethnography; his extensive local knowledge of the region and its landscape and his own initial mapping of the Safor zone alerted him to the need to record the information presented by the buildings there. Dr. Joan Seguí was undertaking at Leicester MA and then doctoral research into shepherds and ethnoarchaeology in the Famorca and Fageca districts, and he was thus able to extend his expertise into this related district (Seguí 1995, 1999). Similarly Victoria Gil Senís' study offered an extension to work already undertaken by her for an MA thesis on the geomorphology of the territory (Gil Senís 1987a, 1987b, 1989). The British collaborators drew upon their expertise and experiences from project work on the Rascino plateau in central Italy, integrating survey, excavation and ethnoarchaeology in interpreting medieval settlement and exploitation in relation to transhumance. As in La Llacuna, Rascino had, in the 1990s, been opened up to tourism, marked by a new tarmac road, the building of a bar-cum-restaurant, the scattering of barbeque points, and the transportation of sheep and shepherds by lorry. Shepherds and extant farmhouses all provided invaluable guides to assessing archaeological survivals (Barker & Grant 1991; Christie ed. 1992; Beavitt, Christie & Leggio 1994). The lure of more sunshine, sheep and (the occasional trip to the) sea was enough to tempt Paul Beavitt, with nearby summer residence, to organise with Dr. Gisbert, the Serra de l'Altmirant Survey (pl.4).

This is one of few studies which have investigated post-medieval and pre-modern landscapes as their central brief; in most other cases, the period is one tacked onto wider survey projects, even if with good academic ethnographic/ethnoarchaeological input (e.g. Barker & Grant 1991); or too often the medieval and modern periods are ignored through

being less interesting or being too visible to map and interpret. Documents do exist and structures may stand, but frequently the two do not come together and oral history may remain untapped until the final vestiges of the pre-modern past disappear (cf. Whitelaw 1991; Stedman 1996).

We hope that this project goes some way to bringing into focus a marginal but fascinating area of Spain: beautiful and seemingly wild, but one in which humans and nature once combined resourcefully, even if only for a relatively short while. The contrast is now between the wilderness of the Gallinera and the chaotic human scatterings in the Llacuna: the former where man seemingly lost out and nature reclaimed its space, and the latter where nature is being eroded. Something of the old continues, however: a few shepherds – but perhaps three at most for the Gallinera valley – still take flocks up the slopes and over the ridges for summer pasturage. Manolo, who graces the cover and title of this monograph, is one of these last few: his woven back pack, his rugged face and his very clothes

capture the essence of the last remnants of the old ways in these mountains.

This monograph covers the results of the Survey undertaken in four short seasons (April 1994, April 1995, May 1997, May/June 1998 – most seasons of nine days' duration). Although restricted external funding prevented realisation of all of the Survey aims, nonetheless, significant results were achieved, thanks to the commitment and efforts of all concerned. The monograph thus provides a synthesis of the structural analyses and ethnographic and geomorphological studies, combined with archive and ceramic analyses. Full site catalogues are provided in the gazetteers (*Part VI*). The archive for the Survey is housed in the Museu Arqueològic of Denia; a copy is kept at the School of Archaeology and Ancient History, University of Leicester.

*Pl.3: Abandoned corral VG19 with spectacular Gallinera valley landscape setting*



## ACKNOWLEDGEMENTS

This has, throughout, been a small-scale project, which has been kindly supported chiefly by funding from local sources, primarily the Conselleria de Cultura de la Generalitat Valenciana. Permission for the Survey was granted by the Ministerio de Educacion y Ciencia (Acciones Integradas) and the Director General of the Patrimonio Artistico, and supported by the Chief of the Servicio de Patrimonio Arqueológico, Etnológico e Histórico of the Generalitat Valenciana. Supporting travel grants were generously provided by The Arts Budget Centre at the University of Leicester and the School of Archaeological Studies (now Archaeology & Ancient History) kindly provided use of both vehicles and equipment for various of the seasons. The director of the Museu Arqueològic at Denia, Prof. Gisbert, very kindly helped organise accommodation at Villalonga and provide related subsistence in the 1994, 1995 and 1997 seasons. We are extremely grateful to the Villalonga and Vall de Gallinera councils for their hospitality, and for supplying access to their 1:10000 topographic maps.

Our two Spanish partners for this project comprised the Museu Arqueològic at Denia and the University of Valencia. Denia Museum provided much logistical support, including storage of materials. We were very grateful to Prof. Maria Pilar Fumanal at Valencia University (Dept. of Geography) for early discussion on the Pla de la Llacuna landscape and for encouraging Victoria Gil to undertake the geomorphological analyses; her premature death in 1998 was a very sad loss. Our thanks also go to Prof. Carlos Gomez-Bellard (Dept. of Archaeology) for encouraging us to submit interims on our early seasons' results to the journal *Saguntum*; and to Prof. Carmen Aranegui Gasco and Dr. Pierre Guérin (both Dept. of Archaeology) for material support.

Victoria Gil extends thanks to Dr. Maria José López of the Department of Geography, Valencia University, for assisting in the final revisions of her contributions.



Pl.4: Project co-directors Pepe Gisbert and Paul Beavitt outside the Munolo corral

Valencia supplied various keen students in 1994 and 1995 (Josep Castelló, a young Joan Seguí, Pablo Adelantado, Israel Espi Pérez, Ferran Naya), who all enjoyed integrating with MA Post-Excavation students from Leicester University. The various equally enthusiastic Leicester students were Vicki Ioannidou, Kit Owen-Smith, Michael Roy, Pete Boyer (1994) (pl.5); Nigel Jeffries, Anne Stephenson, Kathy Ayers (1995) (pl.6); Giovanna Pizziolo, Alice Robinson (1997) (pl.37). Funds for these students came from the European Social Fund for Transnational Programme, jointly taught between the Department and School of Archaeology of Valencia and Leicester Universities. All our workers (pls.4-6) contributed tremendously to the success of the Serra de l'Altmirant Survey project, coping with extremes of temperature in the exposed Vall de Gallinera zone and with the vicious guard dogs of the La Llacuna. We were

in addition valuably supported for the EDM survey work by Pete Boyer (Essex County Council), (Dr.) Oliver Creighton, now lecturer at Exeter University, and Dott.ssa Luisa Dallai, currently at the Dept. of Archaeology of the University of Siena, Italy – their shouting out of recordings and desired relocations of the EDM still echo across our study zone (pl.11)! Luisa and Oliver produced the detailed survey of VG4 and its environs and a first GIS analysis of the Gallinera farms (fig.6). For 1997 and 1998 we welcomed Dr. Sarah Scott (Leicester) who very ably assisted in our final phases of mapping and was used as a frequent scale. We also fondly recall the unending help of Sarah Pantling (née Beauchamp) who attended the Project in 1994-95 and supported the work through to 1997 with her reliable typing and organisational work in Leicester.

We are very grateful to Debbie Miles-Williams at the School of Archaeology & Ancient History in Leicester who has helped most efficiently and patiently to produce numerous of the figures that adorn this monograph (and coping with our frequent modifications!); in addition Lucy Farr

assisted in printing up various of the photographs; Ian Reeds kindly assisted in scanning in text images; and Melissa Funnell in the Graphics Department of Audio-Visual Services at Leicester University bravely took on the tasking of putting the illustrations into the gazetteers. Also, Jovanka Babic of Barcelona University (L'Escola d'Idiomes Moderns) most kindly assisted in some last-minute translations, and Rob Young (Northumberland National Park) advised fully on marginality issues. Particular thanks are extended to Hamish Forbes (Nottingham University) for his full, invaluable comments as referee to the volume as a whole.

Penultimately, it is vital to note that it was the long-standing friendship of Neville and Doreen Burge which first drew co-director Paul Beavitt to Spain and to the delights of Playa de Piles – in sight of the Serra de l'Altmirant. But the very final vote of thanks is extended to the Beavitt, Christie and Gisbert Santonja families for their patience throughout those disrupted Easter vacation periods!

*Pls. 5 & 6:  
The 1994 Leicester and Spanish  
team in La Llacuna, and the  
1995 crew find shelter!*

