- A concentrated flow (normally a volume of water running through the ravine). Structures will accordingly be located near or even in the ravine bed (e.g. VG4; cf. LL A).

Similarly, the landscape was fully utilised in terms of building materials, since the natural limestone's geological characteristics facilitated the process of stone extraction. Three basic types of extraction process were recognised:

- Sites at which strata have been quarried from the slope (e.g. VG16, cf. Corral del Tio Joaquim - LL EE)
- Corrals at which an escarpment needed to be created in order to obtain stone from the stratum near the surface (e.g. Corral de Paco, VG4, VG5, VG1, cf. LL E)
- The simple collection of stones from ravine beds: these stones tend to be rounded through water action, and do not display marks of cutting/extraction such as are evident in the first two types described.

These observations combine to enhance our understanding of the necessary union between farmers and the surrounding natural landscape. This must, however, have been a constantly evolving relationship, and the symbiosis must have been modified depending on changing levels of exploitation due to economic and human demand. The terrace systems, for example, would not have been laid out in one instance and may denote expansion of cultivation, with accordingly increased water demands. These considerations have important implications for understanding the sequence and character of usage (e.g. whether permanent or seasonal, whether agricultural or pastoral) and on possible causes of decay and abandonment (Section 5.3).

### 2.7 Case Study II: VG4 Building and Land Use (NC, O. Creighton, JS)

The most fully investigated complex in our Survey is the corral and terrace system at VG4, towards the west end of the Vall de Gallinera survey area, lying relatively isolated from other sites almost alongside the main W-E track leading towards Lorxa, shortly before the transformation of the dirt track into a tarmac surface (fig. 27 ; pls.18, 19, 33; see Gazetteer). The setting has already been discussed in detail above by Gil Senís in Section 2.6.1.ii. This
corral is interesting from a number of perspectives: (i) it bears a name - the Corral de la Serreta de Baix, documented in the 1946/50 map fig.33), and one of the few with a topographic designation ('Corral of the little hill over there' - see Section 2.13iii); (ii) local information on ownership and function was forthcoming; (iii) sections of its terraced fields remain under cultivation; (iv) it preserves two cisterns, one in excellent condition (VG4b) used for animals and humans in particular, and the other (VG4a), now ruinous, used for the northern terraces; (v) fields, cisterns and buildings are carefully integrated within the surrounding landscape context; and (vi) architecturally it can be viewed as a fairly typical corral in build and form. Effectively, although the structure itself is ruinous, VG4's associated features make it a 'complete' complex from which to draw valuable insights into farmer-shepherd working relationships (see Section 2.12).

The corral overall consists of an abandoned building of dimensions $c .12 .20 \times 21.10 \mathrm{~m}$, oriented W-E, with its walled enclosure on the south side, and an external vaulted subterranean cistern (VG4b) and trough close to the southwest flank. The structure backs into the rocky slope of a hill $(670 \mathrm{~m})$ from whose summit one can survey a network of terraced areas ( $\mathrm{F}, \mathrm{G}, \mathrm{H}$ ) to the south-west of the corral, extending down the slopes and into the ravine running northwestwards (fig.27; pls.33-35). On the northeastern slopes of the hill extend areas A and B, with a natural line of fractured rockface, clearly a relic of ancient land movement, utilised as an eastern edge. The ruinous roof to a second cistern (VG4a) lay on these terraced slopes, midway down to the ravine.

To the immediate east of the corral is a subcircular threshing floor, whilst between corral and road to south and then east is a set of three 'fields' or cultivated spaces (areas C, D, E). These plots are still used for cherry and legume cultivation; sections of fields $F, G$ and $H$ are retained for cherry and almond trees, but those terraces away from the road in these areas were (in our study seasons) neglected and overgrown with weeds - implying, however, that their redundancy was quite recent. Terraces A and B are no longer cultivated and in places their walls are badly eroded. Clearly, at its height, this was a very busy farmed landscape, exploiting key
areas of water and soil catchment; terracing alone reflects significant human investment. Now, however, despite the pockets of maintained terracing and cherry trees, the rocky slopes seem particularly barren.

The corral is well preserved, with walls generally extant to roof height; part of the north face has collapsed near its eastern doorway and also some of the internal sub-divisions. Whilst the roofing has collapsed or been removed, the start of the roof pitch on both the north and west flanks is preserved, indicating pitches inward towards the enclosure. On the terraced north flank, the façade stands upto 2.3 m high externally, and nearly 2.9 m high internally; at the south-west corner of the north block, external height is 1.80 m . The western flank to VG4 is set on more level ground, but at its south-west corner is externally 5 m high (internally 3.9 m ) (pl.35), diminishing to 3.5 m externally at the junction with the enclosure south wall. A levelling course 1.0 m below the roof line on the west wall coincides with internal holes for ceiling beams. The enclosure all told covered an open space of $c .16 .65 \mathrm{x}$ $7.40 \mathrm{~m}\left(123.2 \mathrm{~m}^{2}\right)$. Wall construction tends to be of medium $(20 \mathrm{~cm}+)$ to small stones, some weathered, with variable use of larger material (dimensions greater than 30 cm long), except in the lowest foundation levels of the walls and particularly at the wall angles/corners, where careful efforts at quoining with quite well cut stone have been executed (fig.30:1-4).

Detailed elevation drawings and photographic coverage of the corral walls were executed, combined with mortar analysis (by Nigel Jeffries). These studies highlighted a series of phases to the structure of VG4 (figs.28, 29), although it is not easy to discern the time span separating these (but see Section 2.10 below). The first phase will have comprised a rectangular building, with byre and store over on the western flank, fronting onto the large enclosure; the northern flank was occupied by the residential block with two doors, although animal access into the enclosure must have been through the eastern of the two doors, which communicates directly with a door on the northern side of the enclosure. Mortar analysis and wall construction joints would suggest that the northern block was constructed as the first unit of this Phase I plan, but with the enclosure probably added immediately afterwards. The 'house' mortar in this phase was of sandstone
filler with some oxidised red clay, aggregates of carbonate (pebbles, chips) and occasional charcoal inclusions; that of the enclosure wall appears a harder mortar with some tile inclusions. Most of the materials needed for the preparation of the mortar will have been drawn from the immediate area of the corral. (Note that in Section 2.10 JAG suggests that the Phase I just outlined above may in fact follow an original plan consisting of just north block and matching narrow enclosure - although evidence for this is by no means conclusive).

Subsequently (Phase II) the northern unit was subdivided as was the enclosure (with no communicating door), probably indicating two separate owners or at least a significant change in function (although, interestingly, our local informants argued against the corral ever having just one owner). The dividing wall in the northern block featured little mortar (or it was very poor mortar now largely decayed). The enclosure division, however, was drystone-built with largish stone, and accordingly was thicker $(0.6 \mathrm{~m})$ in construction than most of the corral walls (generally $0.45-0.5 \mathrm{~m}$ thick).

A third phase appears to have been marked by the blocking off of the eastern half of the corral, by the closure of the eastern door on the north wall, and a reduction in width of the western doorway from the byre to the enclosure (from 1.5 m wide to just 0.6 m ). Various of these late repairs were effected with mortar featuring tile fragments, although the north-east door blocking was in fairly large drystone. The remaining house door featured a concrete jamb. There were also evident signs of partial and recent post-abandoment (re)use of VG4 as a shelter (as indicated by the presence of modern tile, and by used gun cartridges) (cf. Section 2.12 below); and, as noted, the continued use of at least part of the terraced field systems shows a maintained agricultural value to the site.

### 2.8 Case Study III: VG16 (NC)

The unnamed, less complex corral at VG16 lies south of the modern main route across the Gallinera watershed close to the track leading towards Beniali. It occupies a stunning location close to the slopes of the rambla (torrent) cutting down towards Beniali-Benisiva with extensive views westwards and towards VG14 with its extensive network of narrow slope-

