

activities. Survey teams comprise small groups of men and women of a variety of ages (21–36) and fitness levels, involved in activities that included walking to particular locations, periods of search and collection of resources (in our case lithics) and brief rest periods. These activities also filled a ‘working day’ of between five to seven hours, and took place in the same topography that we are trying

to understand. Through the course of one field season, the survey group were monitored over eight separate survey days, and of the survey party five individuals were monitored on each occasion. To take account of the effects of activity on heart rate differences and to facilitate the interpretation of time, distance and energy expenditure, the day was divided according to the three basic activities of ‘transfer’ (walking to survey locations), ‘foraging’ (field survey), and rest.

| Stone Type | Size (mm) |
|----------------|-----------|
| Clear / Gravel | < 2 |
| Gravel | 3 – 63 |
| Cobble | 64 – 256 |
| Boulder | > 257 |
| Bedrock | |

In addition to heart rate other relevant data was also collected¹. Regular characterisations of the nature of terrain over which the group was moving were recorded (Table 3.2). Likewise the vegetation through which the group was walking was also described following Harris (1980) as either: (1) open, (2) grassed, (3) open scrub, (4) closed scrub, (5) open forest, or (6) closed forest. The slope of the terrain for the walking party was also determined, from vertically upwards at 90°, through horizontal at 0°, to vertically downwards at -90°. Finally, temperature readings, including those of the subjects, were also taken regularly.

Table 3.2 Characterisations of terrain employed in the monitoring of the field survey walks during the heart rate exercises (adapted from Thones 1979)

An example survey day is described and illustrated below (Figure 3.9). Survey and heart rate monitoring of the party (two males, three females) started at the Cave of Hearths at 9:38 am with three periods of foraging over rocky and steep terrain to points 1 and 2 on the map (Figure 3.8), followed by longer periods of transit to lunch

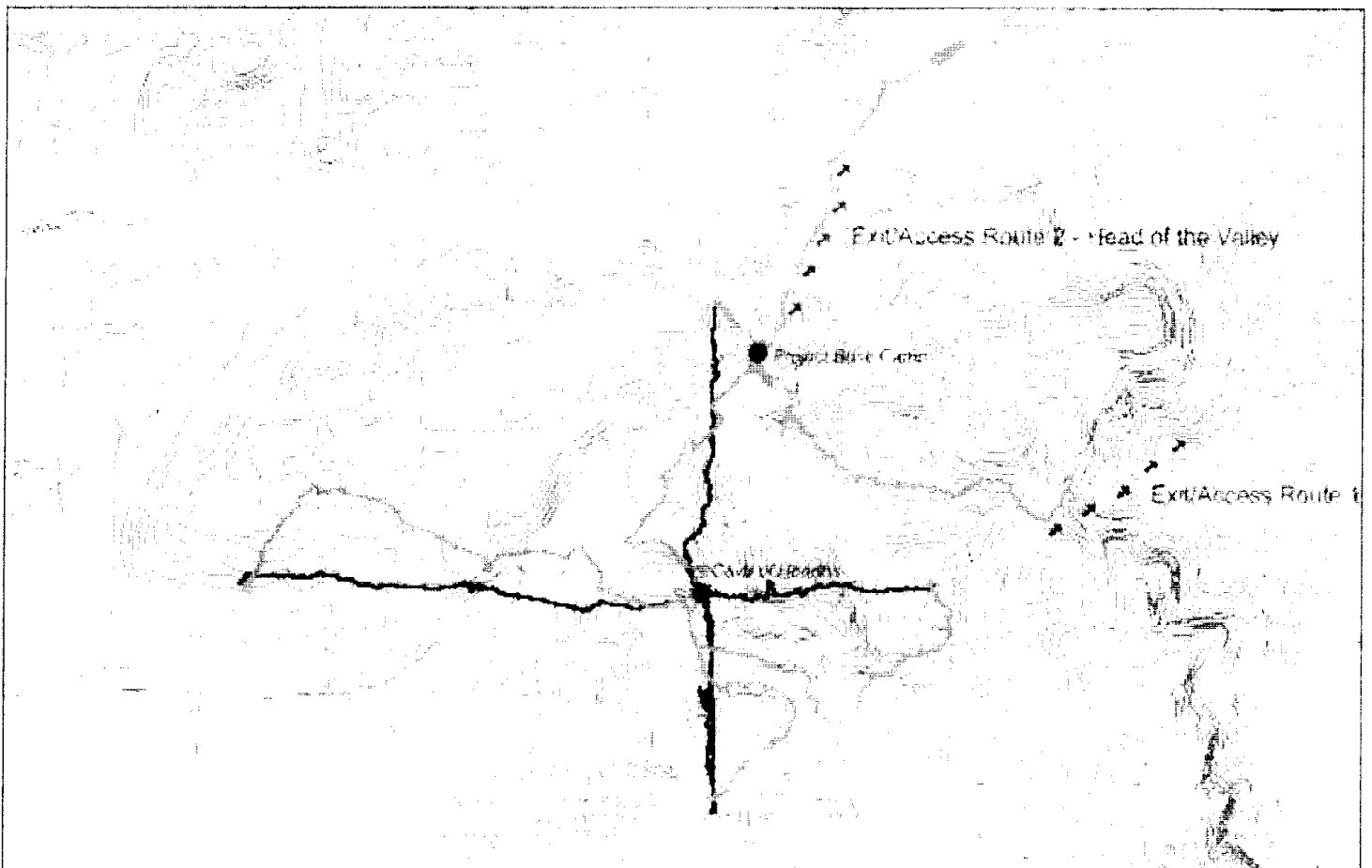


Figure 3.8 Hand-held GPS tracklogs of the walked transects. Decision free routes are black, decision point routes are grey. The two key access routes into the Swartkrans Valley are also noted on the map. All routes have been overlaid onto 1:50,000 topographic data including contour, drainage and main roads.