This paper presents a summary of archaeological work conducted at Foothill Ranch in the El Toro area of unincorporated Orange County (Figure 1). This is a 2743-acre development built out between 1989 and 1999.

The main point of this paper is to show that entire prehistoric landscapes can disappear in a very short period of time. It demonstrates the responsibility that lead agencies, developers, and archaeologists share in ensuring that evidence of past peoples is not lost.

In 1989 the property was pristine ranch land resting in the rolling foothills of the Santa Ana Mountains and bisected by well-watered drainages. In many places it was impenetrable chaparral jungle. Now it's a modern mixed-use residential, industrial, and commercial area. The only remaining jungle is the jungle of major franchise chain retailers and fast food purveyors.

At the end of all the building Foothill Ranch Company agree to sponsor an overview study of all that had occurred in the realm of archaeology during their development boom (Sawyer and Brock 1999). We are grateful to them for funding a synthesis study of which they were under no obligation to do. The resulting document is a guide to all the archaeological research that has occurred at the development. More such synthesis studies need to be done for large development projects to help in the understanding of all the gray literature generated.

All told there have been more than 25 archaeological studies on the property and 27 prehistoric sites have been recorded. No historical sites have been noted. These studies included a full spectrum of archaeological research—surveys, test excavations, data recovery excavations, and monitoring. Virtually all of the project area was monitored. Because of the hilly terrain and drainages involved, grading was more intense than is typical on most development projects. The potential for remaining cultural resources is essentially nil.

All of the research points to the area being subject to an ancient and fairly intense utilization. Solely on the basis of the artifact group represented this occupation of the area has been assigned to the Millingstone Period. The chief characteristics of Millingstone sites are: (1) an abundance of milling stones (specifically manos and metates); (2) large core and percussion-flaked tools such as scraper planes and choppers; (3) their location on hilltops, bluffs, and ridge lines; (4) the relative absence of projectile points (when points are found they tend to be large spear or atlatl types); (5) a general lack of faunal remains; and (6) the enigmatic cogged stone (which generally appears on larger habitation sites). The Millingstone period dates somewhere in the range of 7000 to 3000 years ago.

THE RESEARCH

At the time of the start of the Foothill Ranch project it was known that numerous sites existed on the property but it was unclear what time frame, or frames, the sites would fall into.

The first step of archaeological research for the actual Foothill Ranch development was the
preparation of an overview and research design by Mike Macko and Patricia Singer in 1988 (Macko and Singer 1988). This was a fairly good document that was largely ignored by subsequent researchers.

In 1989, with developers chaffing at the bit, archaeological fieldwork got started with a bang. Unfortunately the best known and most substantial sites were within the areas to be developed first. It soon became clear that we were dealing with a complex of early sites belonging to the Millingstone period that rivaled other Millingstone complexes such as found in the Prado Basin and at Bolsa Chica.

In 1989 RMW Paleo Associates conducted data recovery at CA-ORA-491, CA-ORA-949, CA-ORA-950, and CA-ORA-1242. Unfortunately, as of the time this paper was written (April 2000) the RMW report on this research was still in preparation. During the preparation of our overview study of Foothill Ranch (Sawyer and Brock 1999) Ron Bissell of RMW was kind enough to provide us with some information.

We believe that three sites they RMW investigated—CA-ORA-491, CA-ORA-949, CA-ORA-950—comprised an interrelated major habitation area. One of the authors (Brock) visited these sites in 1988 and was impressed with the density of the midden present but noted a general lack of artifacts.

As we understand it, aside from your “typical” Millingstone faire of manos, metates, and larger chipped stone items, RMW encountered two caches of cobbled stones at one of the sites, CA-ORA-950 (Bissell 1999). One comprised six cobbled stones and one had seven. These were both in discrete areas of about 40 cm in diameter and 10 cm of elevation.

Figure 1. Foothill Ranch location map.
cm in diameter. Bissell thinks they were in some kind of containers.

Other features were encountered at CA-ORA-491 and CA-ORA-950, including two that consisted of overturned metates with manos underneath. RMW noted a paucity of faunal and other organic remains, including material suitable for dating (Bissell 1999).

Also in 1989, Scientific Resource Surveys, Inc. (SRS) investigated sites CA-ORA-42, CA-ORA-490, CA-ORA-952, CA-ORA-953, and CA-ORA-489 (Scientific Resource Surveys, Inc. 1992). Again, these sites exhibited a paucity of organic remains, including bone, and no dateable material.

CA-ORA-489 was the most substantial of these sites. It produced four features: two were interpreted as roasting features and two as "fire hearths". These features contained fire affected rock and discarded artifacts. There was no evidence of charcoal. CA-ORA-489 was a ridge-line site where there was clearly some kind of processing of collected plant material occurring.

At the same time RMW and SRS were investigating these interesting, if not frustrating sites, monitors with Archaeological Advisory Group were tediously monitoring road construction at the lower elevations of the Foothill Ranch project area. These lower areas, while having abundant water and other natural resources, completely lacked sites. One might have expected the presence of later period sites in such environmental contexts but there were not any present. It can be speculated that there may have been some sort of social restriction (taboo) on the use of earlier occupied areas by later peoples. This pattern is evidenced in the Millingstone occupation areas of the Prado Basin as well (see Langenwalter and Brock 1985).

In 1994 the extension of Glenn Ranch Road impacted other early sites (Harris and Brock 1994, Brock 1995). The most substantial of these were CA-ORA-827 and CA-ORA-1373. These were both interpreted as probable hilltop/ridgeline plant food processing sites. While CA-ORA-827, was in deteriorated condition, CA-ORA-1373 (the "Saddle Site") was a well preserved ridgeline site. This site produced the "usual" undiagnostic artifact scatter of broken milling implements and large chipped stone tools and debitage. There were virtually no organic or dateable material. A macrobotanical sample analysed looked suspiciously like modern plants in the area. Five rock features were found—all interpreted as relating to food processing. These were very similar to the SRS findings at CA-ORA-498. These were approximately one to two meters in diameter, contained virtually no carbon, had discarded artifacts in their matrix, lacked any obvious pit, were one to two layers of rock thick, and had burned soil below them.

The last major findings were made during the Glenn Ranch Road project, although monitoring continued until the end of 1998.

CONCLUSIONS

Despite the expenditure of considerable amounts of money by the developers involved, and even by the County of Orange during its darkest days, we can still only speak in generalities about the archaeology of Foothill Ranch. Basically we can summarize that: (1) the area was utilized during the Millingstone period almost exclusively, and (2) there is evidence of a large habitation area and also at least two major plant processing sites situated on ridge tops. Other smaller sites are present but their uses remain unclear (minor satellite procurement areas).

The problems with advancing our understanding of Millingstone sites in this region are formidable. First, because of the poor preservation of organic material, including charcoal, we have an absence of absolute dates and virtually no faunal or macrobotanical assemblages. Second, the artifact assemblages are very generalized with hardly any truly diagnostic forms. Finally, and most importantly, archaeological techniques being utilized at present are not sophisticated enough to deal with sites like these. We need to have more focused research designs and experiment with almost any new techniques we can come up with. We must believe that sites have a limitless amount of information and that it is our responsibility to extract it.

For now the only solution we have to avoid wiping the history of these ancient people off the face of the planet is the preservation of potentially significant sites. At Foothill Ranch it was known that major archaeological sites were present prior to the start of the project but the development was planned without site preservation taken into consideration. Consequently all major sites were destroyed. Developers will generally follow the guidance of lead agencies. Preservation requires a proactive approach on the part of lead agencies, and archaeologists as well, to live up to the spirit of our cultural resource laws.

In conclusion, despite all the research that has taken place, the ancient people of Foothill Ranch...
remain as enigmatic as the cogged stones they left behind.

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