Documenting these sites, historically at high risk of destruction by pothunting and land modification, is critical in determining whether residential distribution patterns, including site component size and persistence over time, are related to environmental settings, including proximity to arable land and perennial water. Do river geomorphology and soil fertility enhance resilience to long periods of reduced rainfall?

This study also compares prehistoric settlement patterns in the York-Duncan Valley, in the western Mimbres-Mogollon region, with those in New Mexico’s Redrock Valley and the Mimbres River Valley.

Sites are defined as aggregated if they include at least 15 rock rings, 20 pithouses, and/or 30 pueblo rooms. We find more Cliff phase and Early/Late Pithouse period aggregated sites than any other. Eleven of the 38 residential sites are multi-component sites.

Seven of the nine aggregated sites, and ten of the 11 multi-component sites, cluster near three large tracts of agriculturally productive soils near York, Apache Grove, and the Duncan basin. All except the two aggregated outliers—two hilltop cemeras de mincheras sites located at greater distances from both arable land and the Gila River—are also located immediately adjacent to the edge of the geomorphic floodplain.

In a preliminary comparison of research area residential settlement patterns with the Redrock Valley (Lekson 1978, 1990) and Mimbres Valley (Blake et al. 1986), we see a stronger Mimbres Classic presence in both the Redrock and Mimbres Valleys, and a significantly more substantial Early/Late Pithouse period presence in the Mimbres Valley than in the York-Duncan or Redrock Valley. Late Postclassic residential component comparisons suggest the York-Duncan Valley had more Salado sites than the Redrock Valley. However, several large Salado sites are located in the upper Gila’s Cliff Valley and nearby Duck and Mule creeks in New Mexico (Lekson 2006).

The York-Duncan Valley includes what appears to be a greater Early Agricultural/Archaic period presence than either the Redrock or Mimbres Valley.

Comparing site environmental locations, York-Duncan Valley components from all periods were more likely to be located on low terraces near floodplains. Redrock Valley Mimbres Classic sites were more likely to be located on high terraces, with a significant number also found on terraces under 100 ft in elevation. Mimbres Valley Early Pithouse sites are concentrated on isolated knolls along the floodplain, transitioning to the first alluvial terrace above the floodplain during the Late Pithouse period, generally consistent with patterns observed in the York-Duncan area.

We greatly appreciate the support of the town of Duncan, Arizona, and landowners who have generously provided access to their property, including the Sexton, Tyler, Kaner, Richards, Darnell, Barney, and Powers families, the many branches of the Lunt family, the Freeport-MacMoRan company, and Deborah Mendelsohn of the Simpson Hotel. This archaeological survey effort would not have been possible without their participation, or without the wonderful graduate and undergraduate students from the University of Texas at San Antonio who attended the 2015 – 2018 field schools. As always, we gratefully acknowledge the continued support of Raymond Mauldin and the University of San Antonio’s Center for Archaeological Research and the Department of Anthropology, Tony Laumbach, Dan McGrew and the Bureau of Land Management Safford Field Office, and the unmanned aerial vehicle support from John Whisenhunt and Mark Willis.