Lunar Archaeology: A view of federal historic preservation law on the moon (Beth Laura O'Leary, New Mexico State University; Ralph Gibson, Kell House Museum; John Versluis, North Platte Valley Museum; Leslie Brown, Connecticut College)

This paper discusses the legal aspects of the ownership of objects, structures and features left on the moon on July 20, 1969 at the Apollo 11's Tranquility Base site by the United States astronauts. It also focuses on the question of how best to document and preserve in situ this first lunar landing site as a significant historical archaeological site for the citizens of the earth in the future. With initial funding from the New Mexico Space Grant Consortium (NASA), team members researched and documented the archaeological assemblage of over 106 artifacts and features ranging from discarded meal pouches to structural components of the spacecraft. Additionally, the team made a preliminary base map of Tranquility Base. According to the Outer Space Treaty and documents from NASA to the Smithsonian, the artifacts at Tranquility Base remain property of the United States. Although the site is on another celestial body that is not owned by the U.S., we argue that U.S. federal preservation laws and regulations apply to the objects left there (especially the National Historic Preservation Act and its implementing regulations). Tranquility Base is eligible to the National Register of Historic Places and as a National Historic Landmark. It also meets the criteria for UNESCO's World Heritage List. Documented preliminary negotiations by our team with relevant U.S. federal cultural resource authorities reveal a reticence to commit to planning for preservation of the Tranquility Base site. In the foreseeable future, impacts to the site by several nations, including the U.S., Japan and China would threaten its integrity. Other important U.S. and Russian sites also exist on the moon and are worthy of consideration. Future space travel to the moon has the potential to adversely affect those qualities that make the Tranquility Base site an exceptionally significant site to the people of the world.