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Cover

Kilbourne Hole is in the Quaternary Potrillo volcanic field located southwest of Las Cruces, New Mexico. Activity in the volcanic field began at least 900,000 years ago in the West Potrillo Mountains with the most recent activity centered at Aden Crater about 20,000 years ago. Kilbourne Hole is the second youngest volcano in the field. Recent $^{40}\text{Ar}/^{39}\text{Ar}$ dating suggests an age of about 45,000 years old. Kilbourne Hole is a world-renowned example of a maar volcano, a type of volcano that forms when ascending magma interacts with groundwater leading to highly explosive eruptions composed of ash, lapilli, bombs, and country rocks. Cross-bedded surge deposits, like those featured in the cover image, are common and well exposed along the inner crater rim. A granulometric analysis of deposits associated with Kilbourne Hole maar is presented in the paper beginning on page 45 of this issue. In addition to the world-class volcanic geology, Kilbourne Hole is also widely known for the abundance of peridotite mantle xenoliths, as well as crustal xenoliths, that were incorporated into the ascending magma and now litter the crater rim. In addition to attracting geologists, the National Aeronautics and Space Administration (NASA) has previously used the otherworldly landscape for training astronauts. Much of the volcanic field including Kilbourne Hole, along with regions in the Organ Mountains, Doña Ana Mountains, Robledo Mountains, and Sierra de las Uvas were designated as the Organ Mountains–Desert Peaks National Monument on May 21st, 2014. *Photograph and caption courtesy of Matt Zimmerer.*

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New Mexico Bureau of Geology and Mineral Resources
Director and State Geologist
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Manager Publications Program/Layout: Brigitte Felix
Managing Editor: Gina D'Ambrosio

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Email: NMBG-NMGeology@nmt.edu

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