

# Perseverance has a pet rock

June 8 2022, by Eleni Ravanis

---



Mars Perseverance Sol 343 - Front Left Hazard Avoidance Camera: A rock in the front left wheel of Perseverance on Sol 343, image was acquired on Feb. 6, 2022 (Sol 343). Credit: NASA/JPL-Caltech

How do you choose a rock on Mars? Sometimes you don't—it chooses you.

For the past four months, Perseverance has had an unexpected traveling companion. Back on sol 341—that's over 100 sols ago, in early February—a rock found its way into the rover's front left wheel, and since hitching a ride, it's been transported more than 5.3 miles (8.5 km). This rock isn't doing any damage to the wheel, but throughout its (no doubt bumpy!) journey, it has clung on and made periodic appearances in our left Hazcam images.

This is not the first time a rock has hitched a ride on a Mars rover mission. Some 18 years ago, a potato-sized rock found its way into the Spirit rover's rear right wheel, and had to be dislodged. On the Curiosity rover, the front right wheel has periodically picked up its own traveling companion. While it's unclear exactly how long these rocks stuck around, they tended to hop off after a few weeks. Perseverance's current companion is therefore on its way to setting Mars hitch-hiking records.

Perseverance's pet rock has seen a lot on its travels. Back on sol 341, we were still in our Crater Floor Campaign, where we examined rocks that are part of the Máaz formation, which we believe is made up of [lava flows](#). If this pet rock could talk, it might tell us about the changes it noticed as we traveled back north through the Octavia E. Butler landing site, and then west, passing the spectacular remains of the former extent of the delta, Kodiak, on our journey to the western Jezero delta. We're now in the Delta Front Campaign, and we just abraded what might be our first sedimentary rock. Perseverance's pet rock is now a long way from home.

Where might this pet rock end its journey? It's possible that the rock may fall out at some point along our future ascent of the crater rim. If it does so, it will land amongst rocks that we expect to be very different from itself. As one of our team members quipped this week, "We might confuse a future Mars geologist who finds it out of place!"

So if you're a Martian geologist from the future reading this, maybe a Martian graduate student tasked with mapping the historical site of Jezero crater: take heed. If you've found a rock that looks out of place, you might just be looking at the former pet [rock](#) of Perseverance.

Provided by NASA

Citation: Perseverance has a pet rock (2022, June 8) retrieved 21 June 2024 from <https://phys.org/news/2022-06-perseverance-pet.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.