

Like NASA rover, family switches over to Mars time

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In this photo taken Tuesday, Aug. 14, 2012, David Oh, a flight director of NASA's latest Mars mission, far left and his family have breakfast at 3 pm at their home in La Canada Flintridge, Calif. The Oh family has been living on Mars time and following an odd schedule ever since the NASA rover Curiosity landed in an ancient Martian crater on Aug. 5. Siting from left: David, Devyn, his wife Bryn, Braden, and Ashlyn. (AP Photo/Damian Dovarganes)

(AP) - For one family, an exotic summer getaway means living on Mars.

Martian time, that is.

Since the landing of NASA's newest Mars rover, flight director David Oh's family has taken the unusual step of tagging along as he leaves Earth time behind and syncs his body clock with the red planet.

Every mission to Mars, a small army of scientists and engineers reports to duty on "Mars time" for the first three months. But it's almost unheard of for an entire family to flip their orderly lives upside down, shifting to what amounts to a time zone change a day.

Intrigued about abiding by extraterrestrial time, Oh's wife, Bryn, could not pass up the chance to

take their kids - 13-year-old Braden, 10-year-old Ashlyn and 8-year-old Devyn - on a Martian adventure from their home near the NASA Jet Propulsion Laboratory where the Curiosity rover was built.

"We all feel a little sleepy, a little jet-lagged all day long, but everyone is doing great," Bryn Oh said, two weeks into the experiment.

Days on Mars last a tad longer. Earth rotates on its axis once every 24 hours - the definition of a day. Neighbor Mars spins more lazily. Days there - known as sols - last 39 minutes and 35 seconds longer than on Earth. The difference may not seem like much each day, but it adds up.

To stay in lockstep, nearly 800 people on the \$2.5 billion project have surrendered to the Martian cycle of light and dark. In the simplest sense, each day slides forward 40 minutes. That results in wacky work, sleep and eating schedules. Many say it feels like perpetual jet lag.

The Oh family broke in slowly. A sign on their front door warns: "On Mars Time: Flight Director Asleep. Come Back Later."

Days before Curiosity's Aug. 5 touchdown, the children stayed up until 11:30 p.m. and slept in until 10 a.m. In the beginning, it wasn't much different from a typical day on summer vacation. As the days wore on, they stayed up later and later, waking up in the afternoon and evening.

One day last week, the family ate a 3 p.m. breakfast, 8 p.m. lunch, 2:30 a.m. dinner and 5 a.m. dessert before heading off to bed.

To sleep when the sun is out, their bedroom windows are covered with aluminum foil or cloth to keep out any sliver of light. In the hallway, a handmade calendar keeps track of the days and schedules are written on an oversized mirror. A

digital clock in the master bedroom is set to Mars time.

Bryn Oh keeps a meticulous spreadsheet updated with her husband's work hours and the family's activities. They wear a wireless device that monitors their steps, calories burned and sleep patterns.

When David Oh tells co-workers on Mars time and friends on Earth time about the switch: "Some of them think it's really cool to have the kids along. Some who worked on other Mars missions have said, 'You're crazy.'"

Being night owls has its perks: Braden, Ashlyn and Devyn saw their first shooting star. The family went on night hikes in the hills around the neighborhood. They had a late dinner in Hollywood and gawked at street performers on the Walk of Fame with other tourists. They saw a midnight screening of a zombie film and then went bowling.

One night, Bryn Oh took the children biking in an empty parking lot. The youngest shed his training wheels, and for the first time, pedaled around.

Of the three, Ashlyn has the most difficulty sticking to the Mars rhythm. She tends to wake up too early and balks at naps.

"It's awesome, but it's tiring" she said.

Braden thrives on the weird hours. What teenager doesn't like staying up as late as possible and having frozen yogurt at midnight? He started a blog detailing the family's experiences.

Earthy sacrifices were made. The family traded a real vacation for a glorified staycation. Dental appointments, harp lessons and play dates were scheduled around when the kids were awake, which was a moving target every day.

Still, they managed to host a party a week after the landing, throwing a Mars-themed backyard barbecue complete with a cake shaped like Gale Crater, Curiosity's new home, and topped with candles shaped like stars.

Bryn Oh said it's easy to lose track of what day it is. A simple question like "What time is it?" is difficult to answer. Do you mean Earth time? Curiosity time? The time that their bodies think they're on?

For the mission workers, the schedule is also more grueling than in the past. Their work hours tend to whiplash around depending on when orbiting spacecraft fly over the rover landing site to relay signals to Earth. One shift sends up commands spelling out what Curiosity will do for the day; another pores over the pictures beamed back.

To cope, workers talk as if they're on Mars, saluting "Good morning" to one another even though it might be dark outside. Cots are available for siestas. There's also free ice cream - "a little pick-me-up in the middle of the night," said mission manager Mike Watkins.

Watkins said it's tough for anyone to stray from Earth time let alone a family.

"It's something they're going to remember the rest of their lives," Watkins said.

There have been growing pains. David Oh accidentally showed up to work an hour early one time. The youngest tended to get tired at night.

The family recently reached a milestone: Staying up through sunrise and sleeping during the day.

And just as the children get used to Mars time, they'll have to reboot later this month when they revert to their terrestrial ways in time for the start of school.

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