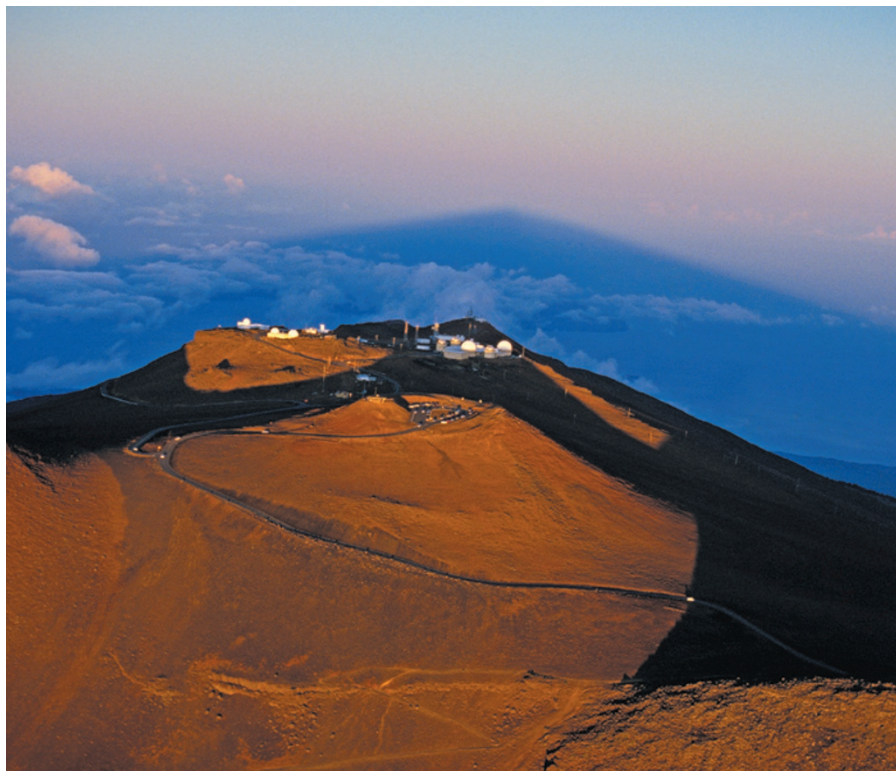


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Observatories at sunrise on Haleakala, Hawaii.

Q&A Dane Maxwell

Mountain guardian

Dane Maxwell is the specialist in Hawaiian traditional culture advising the US National Solar Observatory and its partners as they build the world's largest solar observatory atop Haleakala on the island of Maui. He talks about the sacred mountain, known as the house of the Sun, and local responses to the Advanced Technology Solar Telescope (ATST).

NICK HIGGINS, BASED ON A PHOTO BY DANE MAXWELL



How did you become interested in native Hawaiian cultural issues?

I grew up with my grandfather, who was involved in native Hawaiian politics; my grandmother was a hula teacher. I was sent to a native Hawaiian school. Everything I learned was around the Hawaiian culture, from hula to politics to prayers and other duties our ancestors used to have. My entire life was focused around what I do today.

What does it mean to be a kahu, or spiritual leader, like yourself?

Some people consider a kahu to be like a pastor, but the role is more like that of a Hawaiian shepherd. One thing I was trained in is our duty to human bones that have been dug up in construction projects. In Hawaiian

culture, your spiritual energy is in your bones. That's why reinterring bones is so important. The remains of the fire goddess Pele are said to be within Haleakala. The lava in that area is all her essence.

What's a typical day like for you, advising construction crews on the ATST?

Having grown up with deep respect for the land, it is really hard to watch excavation happening. They are digging out a really large pit and pouring in a lot of concrete. My concern is that people should show basic respect and reverence to the area. A lot of my time is spent making sure that construction workers stay on site and don't throw trash around.

There are a lot of these old rusted vehicles leaking hydraulic fluid everywhere, and you'll see these large stains on this beautiful area. Keeping it as natural and pristine as possible goes hand in hand with culture and nature. I'm up there almost every day, from

sunrise to about three-thirty in the afternoon, sometimes until sunset. It's beautiful. I get to see the mountain in sleet, snow, rain, wind and clear skies.

Many Hawaiians object to the ATST being built. Why are you working on it?

My grandfather and I opposed this project. But we really wanted to conserve as much as possible and do it in the right way. Otherwise it would be like turning our backs on our ancestors. It's our responsibility to take care of the mountain and preserve what we can.

Are cultural issues receiving more attention now than when the first telescopes were built on Haleakala in the 1950s and 60s?

Things are definitely getting better. For this project, the first thing we started with was the removal of a historical site, the Reber Circle, where a radio telescope had been. That's one of the highest points on the mountain, and in Hawaiian culture the highest points have the greatest significance. It was nice to remove that and clean up the mess.

A lot of the complaints are about how big and visible the ATST will be. What do you think about this?

It will be 14 storeys tall — really, really big. I tried to have them paint it another colour, but it had to be white because of its thermal properties. When the US Air Force built its telescope on Haleakala, it wanted to use materials to reflect the sky. But it reflected the Sun, and you can see it everywhere now.

What do you think astronomers ought to know about native Hawaiian concerns?

We don't hate astronomy. It's just that we want to manage the area better. We have an appreciation for science, and we want the scientists to have the same respect and reverence for the site. I always ask — if Hawaii was still its own independent state, would we have telescopes on Haleakala and Mauna Kea?

What does it mean to have a solar telescope on 'the house of the Sun'?

There are two hills up there. One of the demigods, called Maui, supposedly stood with one foot on one hill and one foot on the other hill. He reached up and lassoed the Sun and slowed it down in its passage. So the Sun has a lot of significance for Haleakala. If there has to be a telescope there, I guess it should be a solar telescope. A few of the locals support it. A lot of the community just wishes it could be a little shorter, or in another place on Earth. ■

INTERVIEW BY ALEXANDRA WITZE