

Antarctic Glacier Has Five-story Blood-red Waterfall of Primordial Ooze

GOOD Blog > Patrick James on February 24, 2010 at 5:00 am PST



There is a five-story, blood-red waterfall pouring slowly from the Taylor Glacier in Antarctica's McMurdo Dry Valley. Its back story, [at Atlas Obscura](#), is simply remarkable:

Roughly 2 million years ago, the Taylor Glacier sealed beneath it a small body of water which contained an ancient community of microbes. Trapped below a thick layer of ice, they have remained there ever since, isolated inside a natural time capsule. Evolving independently of the rest of the living world, these microbes exist without heat, light, or oxygen, and are essentially the definition of "primordial ooze." The trapped lake has very high salinity and is rich in iron, which gives the waterfall its red color. A fissure in the glacier allows the subglacial lake to flow out, forming the falls without contaminating the ecosystem within.

One takeaway here is that life possible in extreme conditions. That said, in the absence of ideal conditions, life can evolve without begetting plants or birds or cuddly mammals or sentient beings who write blogs on the internet; it just begets a glob of ooze.