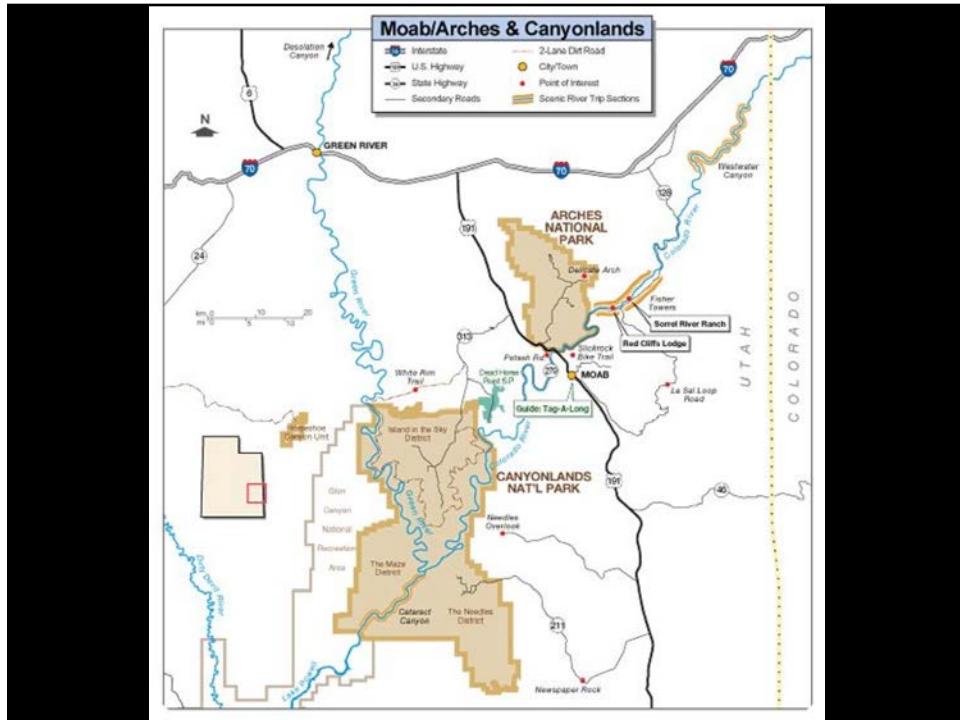


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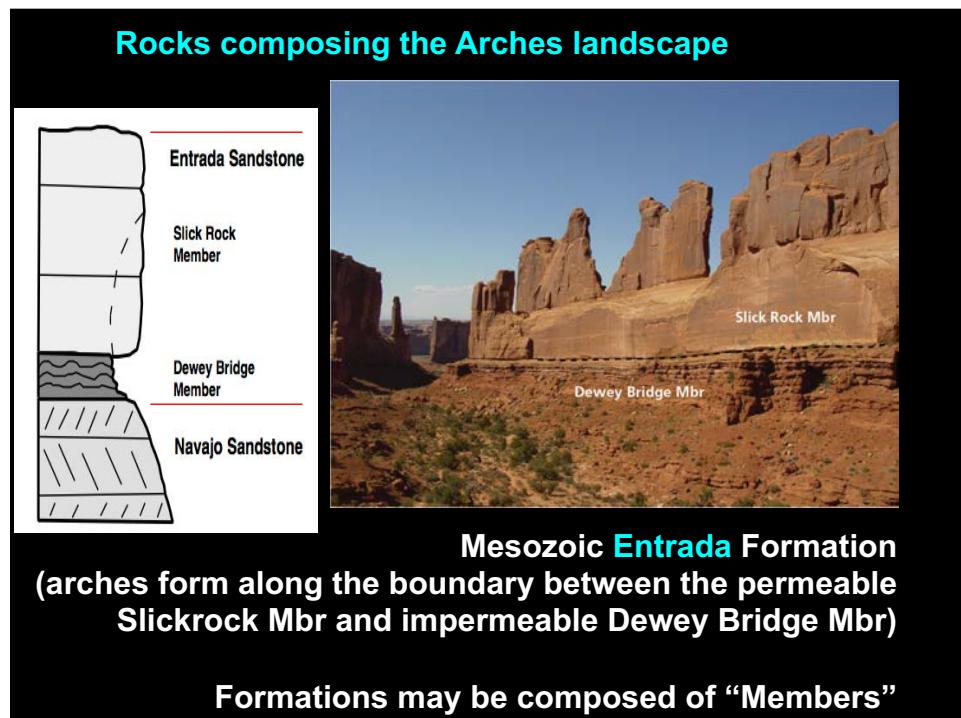
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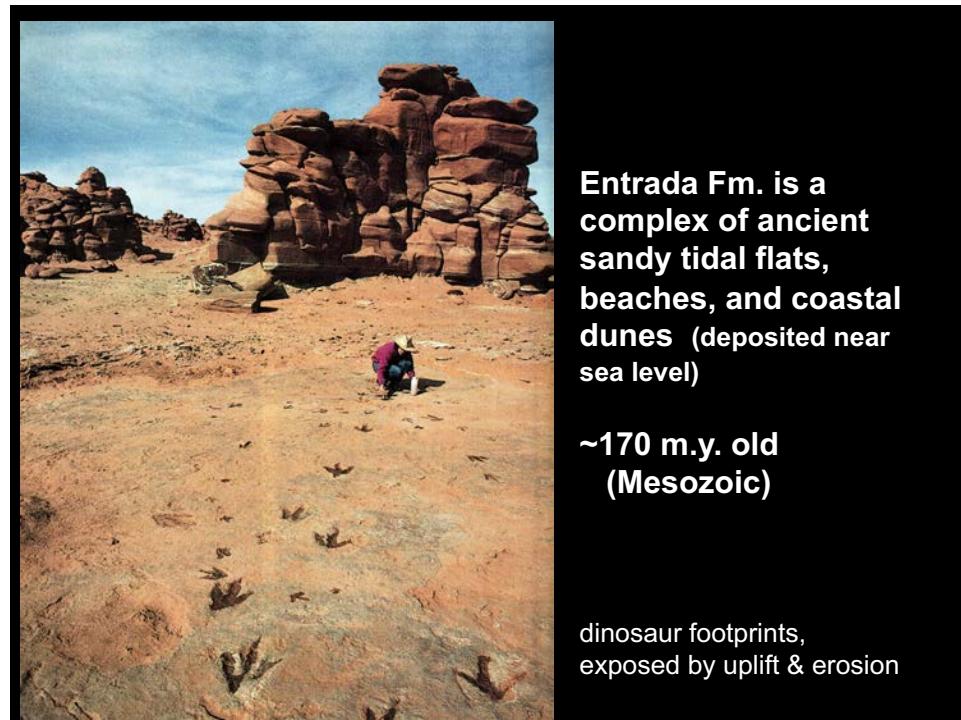
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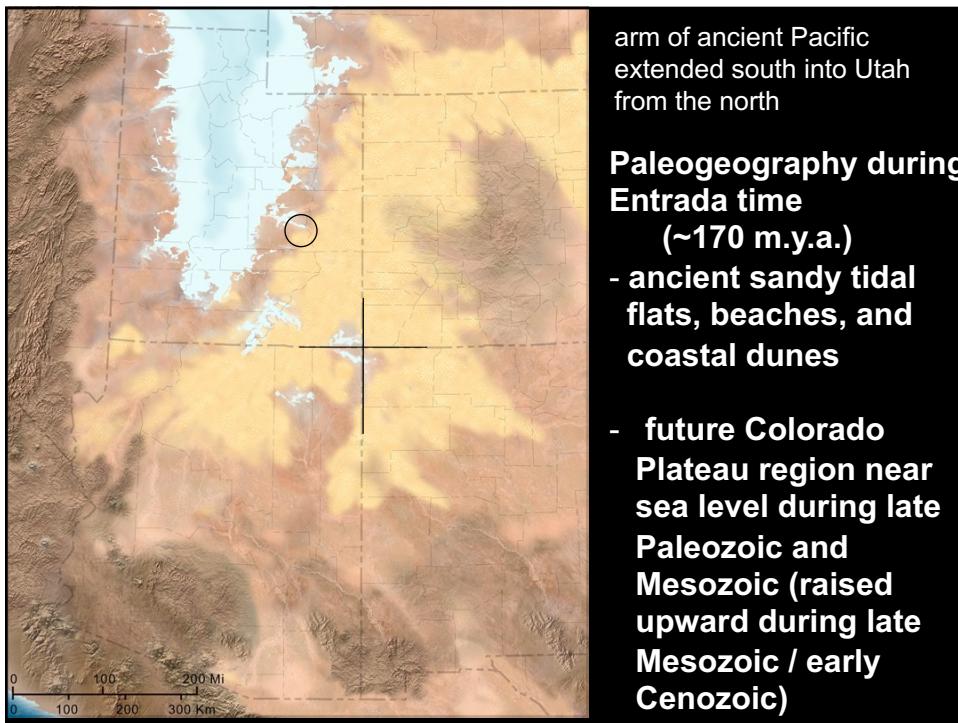
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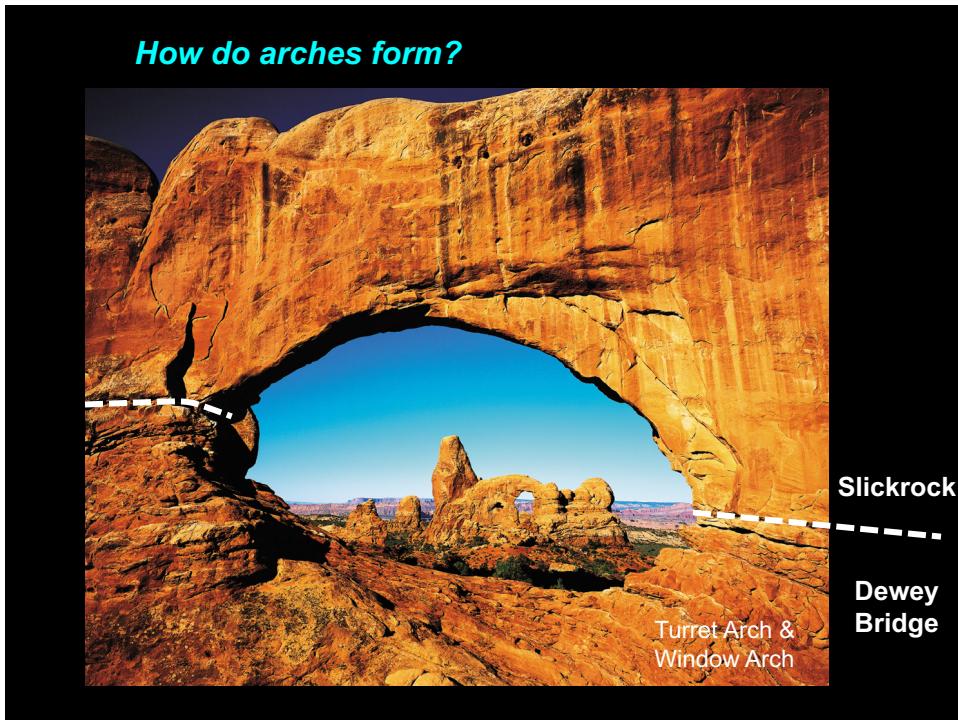
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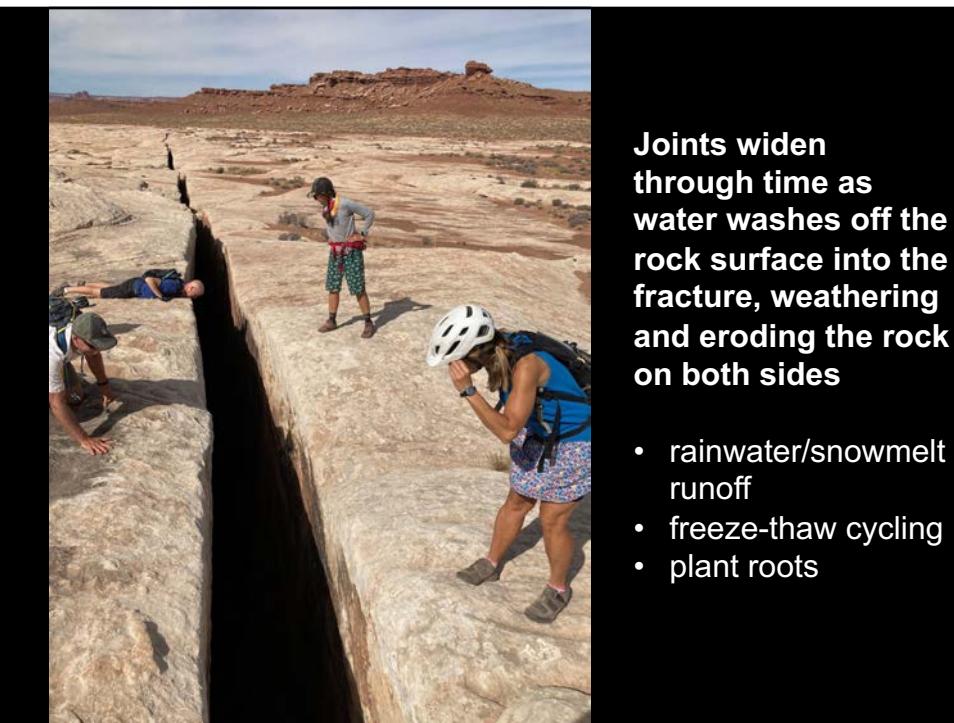
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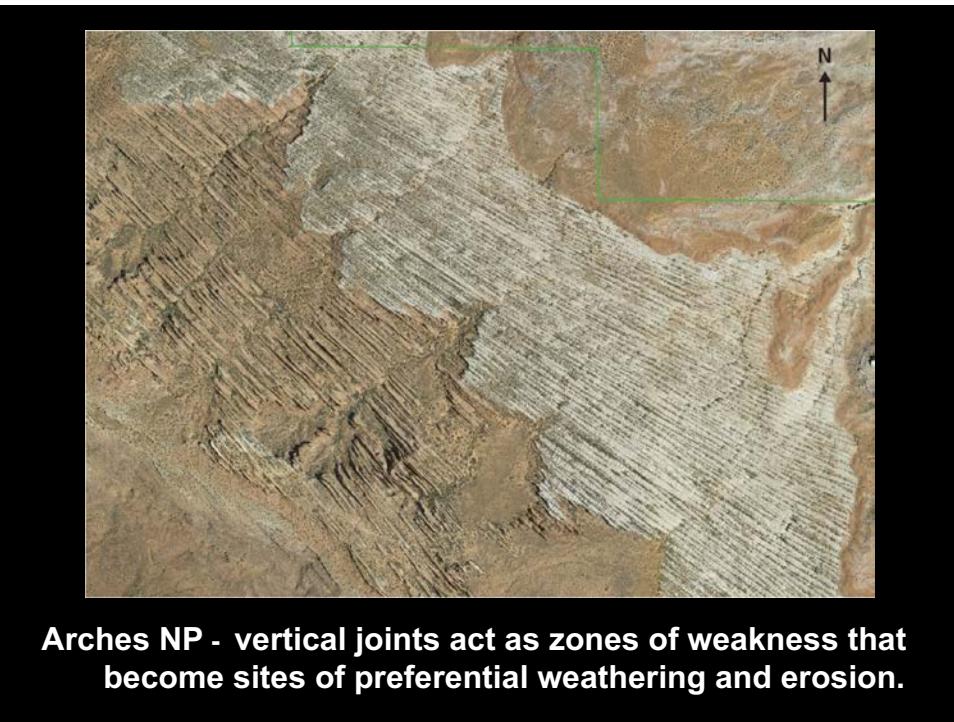
8



Joints widen through time as water washes off the rock surface into the fracture, weathering and eroding the rock on both sides

- rainwater/snowmelt runoff
- freeze-thaw cycling
- plant roots

9



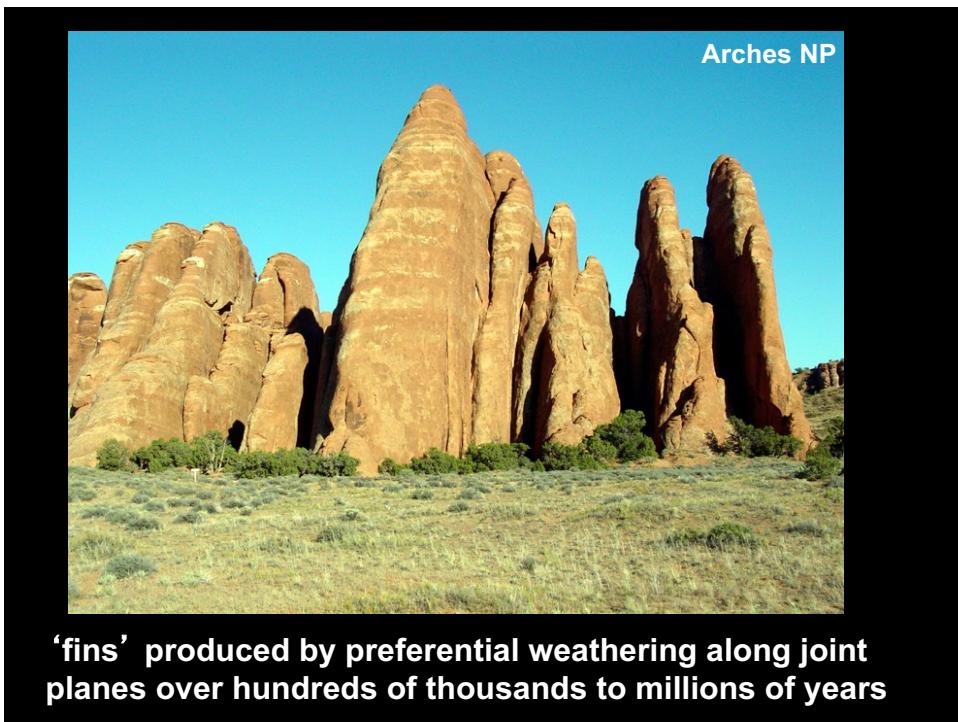
Arches NP - vertical joints act as zones of weakness that become sites of preferential weathering and erosion.

10



**Weathering and erosion along vertical joint planes
creating 'fins' in Entrada Formation - Arches NP**
- deposition, burial, uplift, erosion

11

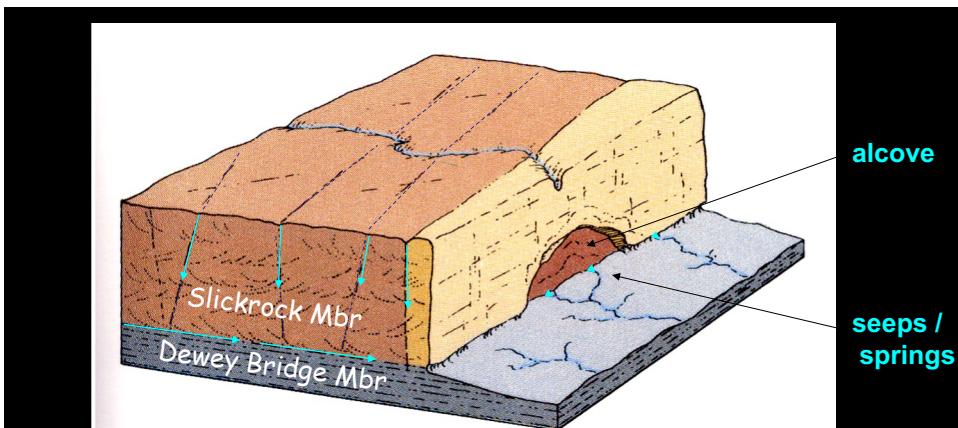


**'fins' produced by preferential weathering along joint
planes over hundreds of thousands to millions of years**

12

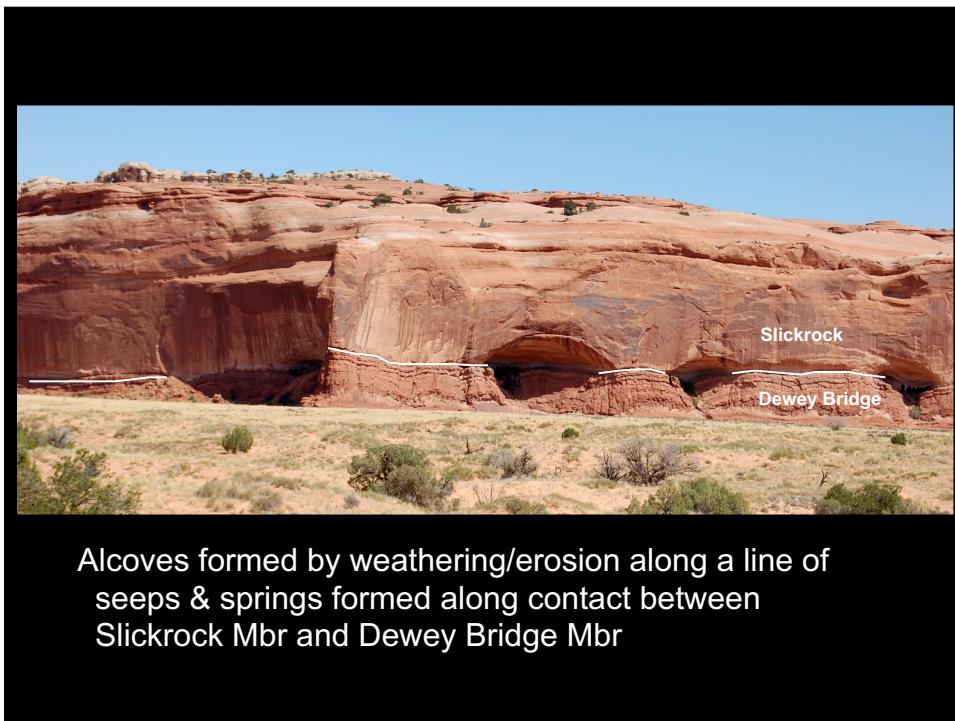


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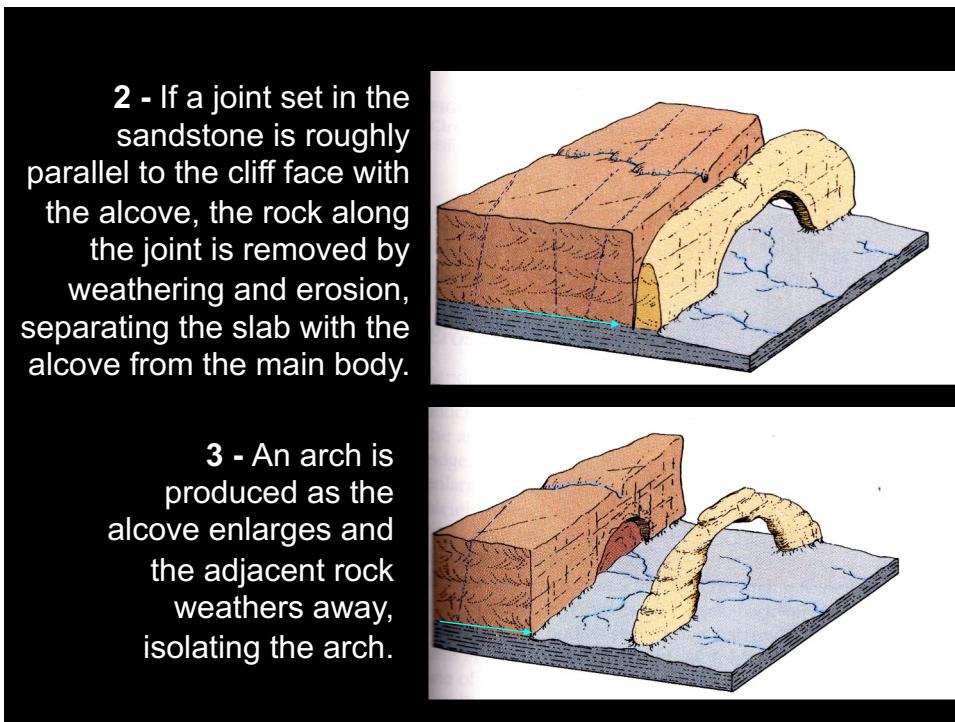


1 - In arid regions, much of the surface drainage seeps into the exposed rock, migrating down along joint surfaces until the water hits the impermeable shales and siltstones of the lower Entrada (Dewey Bridge). The water then flows laterally to emerge as seeps and springs along the contact. The water erodes the area between the two units and an alcove forms.

14



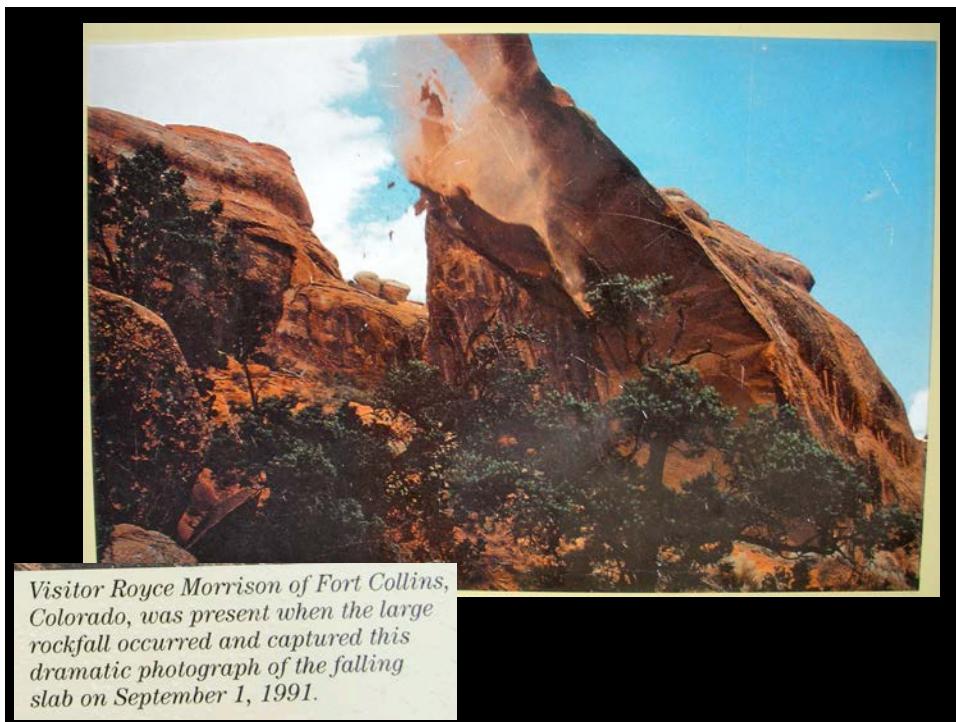
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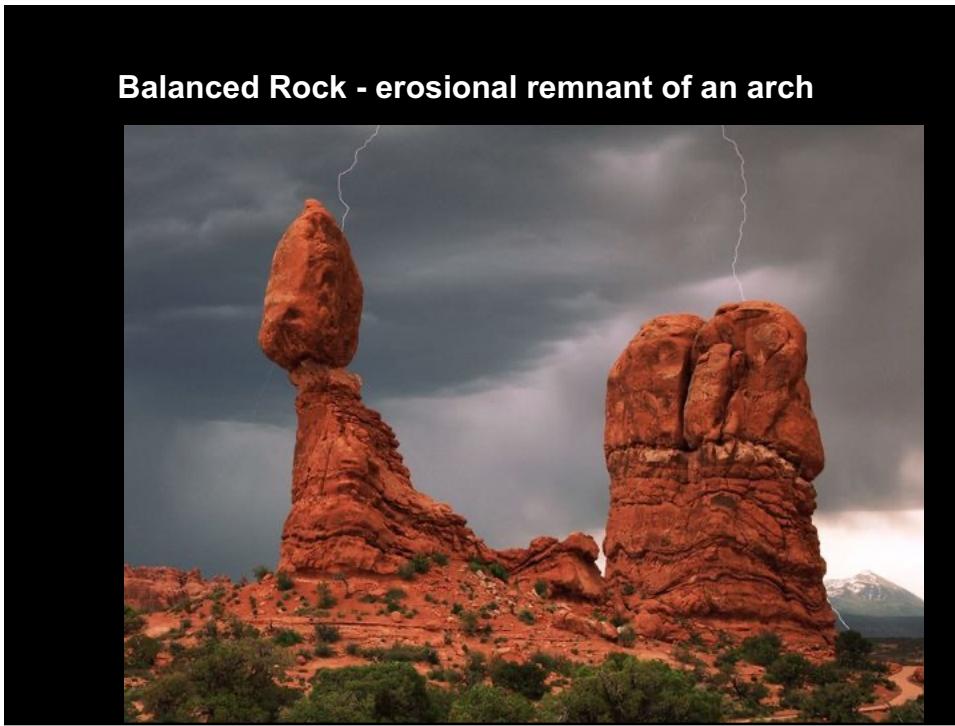
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21



Arches NP

Moderate Day Hikes

Delicate Arch | 3 miles
The trail that likely brought you to Arches for the first time, this heavily-trafficked hike concludes at the world's most famous arch. Visitors can see The Delicate Arch from a nearby viewpoint as well. If you want to experience this arch without crowds consider visiting in winter or trying to reach it at sunrise.

Double O Arch | 4.2 miles
A trail to a most unusual formation where one arch is on top of another.

Devils Garden Primitive Loop | 7.2 miles
The longest, most difficult hike in Arches National Park but a good choice for solitude; includes hiking to Landscape and Double O Arches.

Tower Arch | 3.4 miles
A moderate (or even strenuous) hike to one of the most remote arches in Arches National Park.

Fiery Furnace | 2 miles
A ranger-led (or permit required) hike to a rare desert environment named for the reddish glow it often takes on at sunset, which resembles a furnace.

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