



# Oracle State Park

Tom Buckley

# Topics

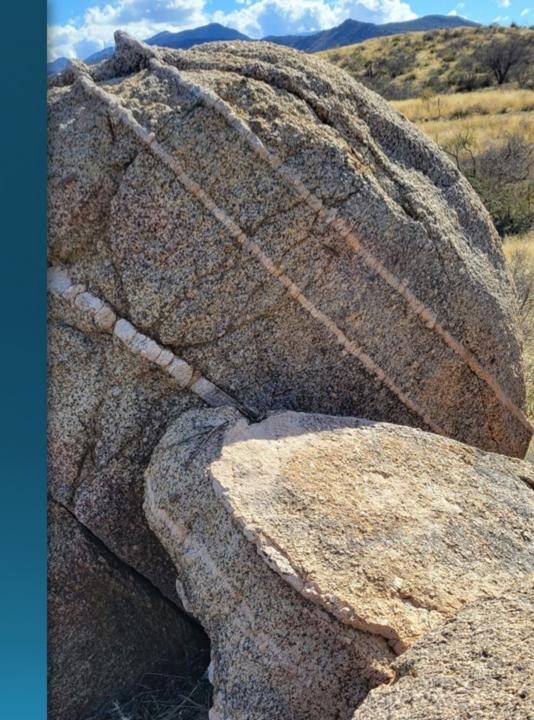
The Park

**New Trails** 

Local Geology

Scheduled Events

Volunteering



#### A Few Facts

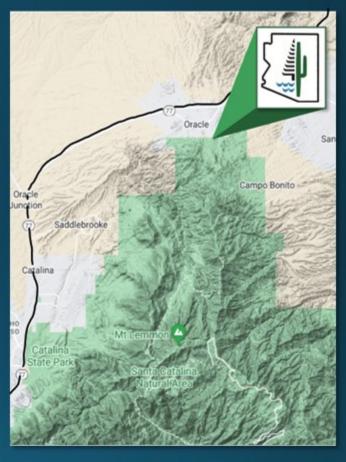
4,000 Acres at 4,500' in Oracle, Arizona
Wildlife Refuge & Environmental Education Center

Designated International Dark Sky Park Several Intersecting Biomes Ranching History that Started in the 1880s Complex Geologic History

Programs, Events, & Historical Buildings 25 Miles of Trails 3 Interpretive Trails – Nature, Ranching, Geology











### Nature Trail



1 Mile Loop Plants and Animals of the Park

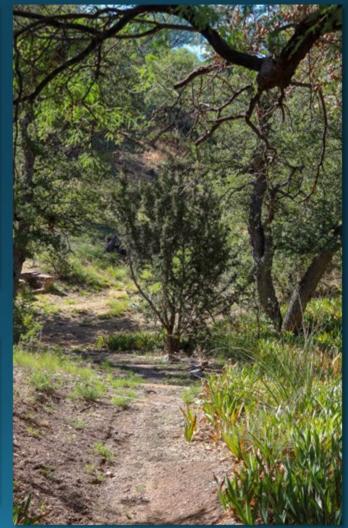
Grassland, Chaparral, & Oak Woodland Biomes Mesquite, Cottonwood, Oak, Manzanita, & Walnut Trees



Manzanita



Lemonade Berry



## New Wildlife Blind – Completed in 2022





Dedicated to the Protection of Wildlife

New Blind Built Above the Waterhole

Deer, Javelina, Hawks, Owls, Mountain Lion

Funded by the Friends of Oracle State Park











All Volunteer Partner of Oracle State Park

# New Kannally Ranch Trail — Opened in 2022





1880's Corrals



Barn



**Pump House** 



Livestock Scale

1/2 Mile Loop Trail Park's Ranching History

Winds Through the Kannally Ranch Supplement to the Historic Ranch House

# Kannally Ranch House











Mediterranean Revival Structure Built by the Kannally Family in 1920s National Register of Historic Places

Self-Guided and Ranger-Led Tours

# New Geology Trail – Opened in 2022



1.2 Mile Hike Through 1.7 Billion Years of History Highlights the Park's Unique Geologic Features

Self-Guided and Ranger-Led Tours



#### Geologic Events That Created The Park's Rocks and Features

Significant Faults, Mountain Building, Erosion, & Filling of Deep Valleys

TODAY

20 M

Copper, Gold, & Silver Ore Was Deposited

66 M

Shallow Seas Invaded & Retreated Multiple Times

252 M

541 M

1 Molten Rock Crystallized Deep Beneath the Surface

#### (1) Molte

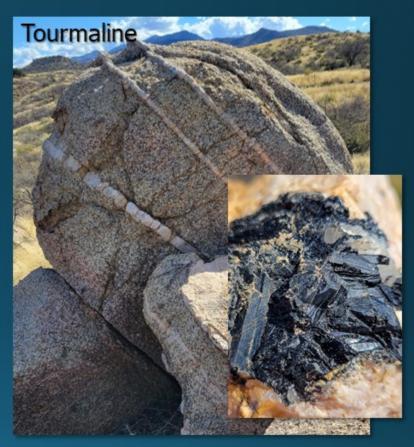
### Molten Rock Crystallized Into Igneous Intrusions



Igneous Rock Formed Deep Below the Surface Faults and Erosion Exposed It



Igneous Rock Invaded Oracle Granite Found along Ridges



Black Elongated Minerals Carried by Hydrothermal Fluids Found at Rock Outcrops

## **(2**)

#### Sedimentary Rocks from Near-Shore Environments



Pediment Section – with Oracle Granite
Bajada Section – with Eroded Rock Fragments
Sedimentary Rocks from the Shallow Sea Period
are Found on the Park's Bajada Hills



Quartzite



Barnes Conglomerate



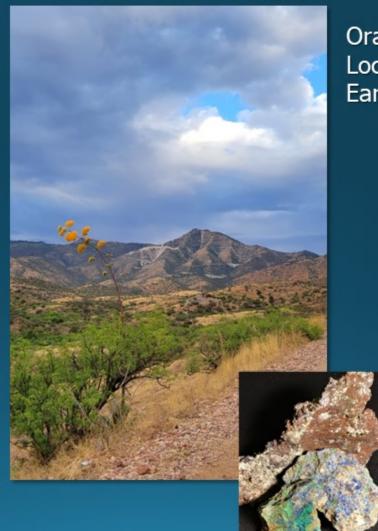
Sandstone and Limestone – Served as a Host for Copper

## **3** Copper, Gold and Silver Was Deposited Nearby





Molten Rock Crystallized Hydrothermal Fluids Rich in Copper, Gold, Silver Flowed



Oracle Ridge Mine – 1930s Located South of the Park Early Stage of Reopening

Copper from Nearby Mines

## 4 Faults, Mountain Building, & Erosion



Catalina Mountains Rose 9,100' from 15 Million Years of Faulting



As Catalina Mountains Eroded, Bedrock Now Exposed as 'Inselbergs'



Last 5-6 Million Years, Erosion Continued, Kannally Conglomerate Formed

## Events - Dark Sky Star Party

Oracle State Park: Arizona State Park System's 1st Designated International Dark Sky Park

In 2014, the International Dark-Sky Association determined that Oracle State Park demonstrated an "exceptional quality of starry nights and nighttime environment that it protects for its scientific, natural, educational, cultural, and public enjoyment".

Dark Sky Star Party – September 21-25, 2022

- Events for Registered Attendees: \$149/Person
- Free Events for Non-Registered Visitors
- Many Events will be Live-Streamed Throughout the World
- Anticipating this will be an Annual Occurrence



Tickets, Information, & Updates: ExploreScientific.com/Events or AZStateParks.com/Oracle websites For Additional Information, Contact Mike Weasner at <a href="mailto:mweasner@mac.com">mweasner@mac.com</a>, weasner.com/co



#### To Visit...

Open 7 Days/Week 7am – 4pm Summer 8am – 5pm Winter

For Programs and Events: AZStateParks.com/Oracle

Phone: (520)-896-2425



#### To Get Involved...



Volunteer through application at <u>AZStatePark.com/Volunteer</u> website with a follow-up email to: Leonard Garcia, Volunteer Coordinator: lgarcia@azstateparks.gov



Arizona Trail: volunteer and learn about opportunities at aztrail.org website



Friends of OSP: join, donate, or volunteer at FriendsOracleStatePark.org

