FLASHFEED STUDY GUIDE

AZT: Rincons & Catalinas

Study guide by FlashFeed

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AZT: Rincons & Catalinas: study guide

A hiker's knowledge bank for the Arizona Trail through the Rincon and Santa Catalina Mountains near Tucson (Passages 8-12). Covers the route and waypoints, water sources and dry carries, trailheads, campsites, navigation, sky-island ecology, flora and fauna, and the hazards of a desert-to-pine traverse.

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In the app	flashfeedlearningapp.com/packs/azt-rincon-catalina

How to use this guide

Take one lesson at a time: read the study guide, then go over any key facts. Where a lesson has a self-test, try it from memory before you check the answer key at the back. Follow the Go deeper links when you want more.

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LESSON 1 OF 19

Route Overview

Passages 8 to 12 · Direction & profile

WHAT YOU'LL BE ABLE TO DO

- Identify and order the five AZT passages (8-12) that make up this stretch by the ranges and terrain each covers.
- Match each passage to the wilderness areas and landmarks it crosses.
- Explain the vertical transect: how the desert-to-forest climb passes through a continent's worth of life zones and yields a cooler high country.
- Distinguish the northbound (NOBO) and southbound (SOBO) hiking experiences of this stretch.
- Recognize that the AZT bypasses the actual summits, such as Mica Mountain, reachable only by off-trail side trips.

This pack covers the Arizona Trail through the two great sky islands that frame Tucson — the Rincon and Santa Catalina Mountains — across Passages 8 through 12. In under 90 miles the trail climbs from Sonoran Desert saguaro flats to montane conifer forest, drops to a hot connector pass, climbs a second range, and descends an exposed ridge. This lesson maps the whole stretch and how its pieces fit together.

Passages 8 to 12

The Arizona Trail is divided into numbered passages, and this segment strings five of them together. **Passage 8 (Rincon Valley)** connects Davidson Canyon to Saguaro National Park, crossing the Cienega Creek Natural Preserve and Colossal Cave Mountain Park on the desert-grassland approach. **Passage 9 (Rincon Mountains)** is the big event — the long climb from Saguaro National Park up toward Mica Mountain and the high pine forest, then down the far side to Redington Road. **Passage 10 (Redington Pass)** is the low, hot, dry transition between the two ranges. **Passage 11 (Santa Catalina Mountains)** crosses the Pusch Ridge Wilderness and climbs through the Wilderness of Rocks toward Mount Lemmon and Summerhaven. And **Passage 12 (Red Ridge)** drops from Summerhaven down Red Ridge and Oracle Ridge to American Flag Ranch near the town of Oracle.

Taken together, this is fundamentally a traverse of the two sky islands that bracket Tucson, joined by the saddle of Redington Pass — a study in how desert gives way to forest and back again.

Direction and profile

The experience depends heavily on which way you walk it. **Northbound (NOBO)** hikers get a dramatic vertical transect: up through every life zone to montane pine in the Rincons, down to Redington Pass, up again into the Catalinas, then the Oracle Ridge descent. It front-loads the single biggest climb — the

Rincons — while legs are fresh. **Southbound (SOBO)** hikers instead open with the exposed, shadeless Oracle Ridge climb, then the high Catalinas, before the long Rincon descent into the desert.

Either way, the defining feature is the **vertical transect**. Because the trail climbs roughly 5,000–6,000 feet from desert to forest twice over, a hiker passes through the ecological equivalent of traveling from Mexico to Canada — Sonoran Desert scrub at the bottom to Canadian-zone conifer on the peaks — in a single day's climb. One practical consequence of all that elevation: high-country temperatures near Summerhaven and Mount Lemmon routinely run **up to 20°F cooler** than the Tucson valley floor, which is why hikers time the low passages for cool months and why snow can linger up high while the desert bakes. A subtle but important note for peak-baggers: despite climbing both ranges, **the AZT bypasses the actual summits** — it skirts Mica Mountain and stays below Mount Lemmon, so the trail's true high point is well under those peak elevations, and tagging the summits requires off-trail side trips.

Key concepts

Passage 8 (Rincon Valley)

- The desert-grassland opening leg of the five-passage stretch, walked before any real climbing begins.
- It connects Davidson Canyon to the edge of Saguaro National Park.
- En route it crosses the Cienega Creek Natural Preserve and Colossal Cave Mountain Park.

Passage 9 (Rincon Mountains)

- The big event of the whole stretch — the single biggest, most demanding climb, tackled first by northbound hikers.
- It climbs from Saguaro National Park up toward Mica Mountain and high pine forest.
- After topping out, it drops down the far side to Redington Road.

Passage 10 (Redington Pass)

- The low, hot, dry transition linking the segment's two big mountain ranges.
- It's the connecting saddle that joins the two sky islands framing Tucson.

Passage 11 (Santa Catalina Mountains)

- The segment's second big range crossing, from the connector's end up into high forest.
- It traverses the Pusch Ridge Wilderness and climbs through the Wilderness of Rocks.
- The climb tops out toward Mount Lemmon and the resort village of Summerhaven.

Passage 12 (Red Ridge)

- The segment's final leg — a long drop off the high country down an exposed crest.
- It descends from the resort village of Summerhaven toward the desert below.
- It bottoms out at American Flag Ranch, the final trailhead of the entire five-passage stretch.

Key facts



Patrick Alexander from Las Cruces, NM · CC0

Passage 10 — Redington Pass

Passage 10, Redington Pass, is the low, hot transition zone between the Rincon and Santa Catalina Mountains — rolling grassland and dirt road with little shade and unreliable water.



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Passage 11 — Santa Catalina Mountains

Passage 11, the Santa Catalina Mountains, crosses the Pusch Ridge Wilderness and climbs through the Wilderness of Rocks toward Mount Lemmon and the resort village of Summerhaven. It includes a vertical-mile climb to Romero Pass.

Passage 12 — Red Ridge

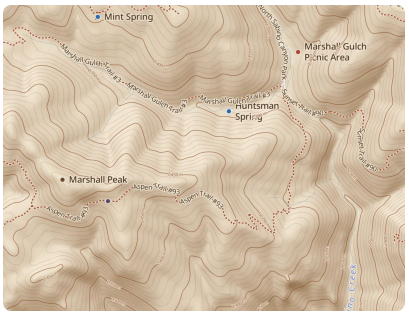
Passage 12, Red Ridge, drops from Summerhaven down Red Ridge and Oracle Ridge to American Flag Ranch near the town of Oracle — a long, dry, shadeless descent with big eastward views.



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Into the Rincons (Passage 9)

Passage 9 climbs from the desert floor near Rincon Valley up into the Rincon Mountains of Saguaro National Park, toward Mica Mountain and the high pine forest, ending at a trail junction just below the summit — one of the Arizona Trail's biggest sustained climbs.



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The Santa Catalinas (Passage 11)

Passage 11 crosses the Santa Catalina Mountains north of Tucson toward Mount Lemmon (~9,150 ft) — the range's high point and the southernmost ski area in the U.S. Its 'sky island' conifer forest feels nothing like the desert 7,000 ft below.

> **The trail bypasses the summits**
>
> Despite climbing two sky islands, the AZT does not tag the actual summits. It bypasses Mica Mountain (the Rincon high point) and stays below Mount Lemmon (the Catalina high point), so the trail's true high point is well under those peak elevations — reaching the named summits requires off-trail side trips.

> **Twenty degrees of relief**
>
> High-country temperatures near Summerhaven and Mount Lemmon routinely run up to 20°F cooler than the Tucson valley floor. That gradient is why hikers time the low desert passages for cool months and savor the pine zones — and why snow can linger up high while the desert bakes.

> **Linking two sky islands**
>
> This segment is essentially a traverse of the two mountain ranges that frame Tucson — the Rincons to the east and the Catalinas to the north — joined by the low saddle of Redington Pass. Each range is an isolated sky island, so the route is a study in how desert gives way to forest and back again.

By the numbers

Vertical feet the trail climbs from desert to forest on each sky island

6000 ft

How much cooler the Mount Lemmon high country runs than the Tucson valley floor (°F)

20 °F

Matched pairs

Each item on the left goes with the one on the right.

Hiking northbound (NOBO) → Front-loads the big Rincon climb while legs are fresh

Hiking southbound (SOBO) → Opens with the exposed Oracle Ridge climb

Rincon high point the AZT skips → Mica Mountain, reached only by an off-trail side trip

Self-test

Answer each question from memory, then check your work against the answer key.

1. Which passage is the low, hot, dry transition zone between the Rincon and Santa Catalina Mountains?

A. Passage 9 (Rincon Mountains)
B. Passage 8 (Rincon Valley)
C. Passage 10 (Redington Pass)
D. Passage 12 (Red Ridge)

2. Walking northbound, what is the correct order of the five passages in this stretch?

A. Rincon Valley, Rincon Mountains, Redington Pass, Santa Catalinas, Red Ridge
B. Rincon Mountains, Rincon Valley, Redington Pass, Oracle Ridge, Santa Catalinas
C. Oracle Ridge, Santa Catalinas, Rincon Mountains, Redington Pass, Rincon Valley
D. Rincon Valley, Redington Pass, Rincon Mountains, Santa Catalinas, Oracle Ridge

3. Which passage is the longest and highest of this stretch — the big climb toward the high pine forest?

A. Passage 12 (Oracle Ridge)
B. Passage 8 (Rincon Valley)
C. Passage 11 (Santa Catalina Mountains)
D. Passage 9 (Rincon Mountains)

4. This stretch is essentially a traverse of which two ranges, joined by Redington Pass?

A. The Santa Catalina and Chiricahua Mountains
B. The Rincon and Santa Catalina Mountains
C. The Rincon and Huachuca Mountains
D. The Pusch Ridge and Oracle Ridge highlands

5. Which of these is NOT one of the five passages that make up this stretch?

A. Red Ridge
B. Davidson Canyon
C. Redington Pass
D. Rincon Valley

6. Which passage crosses the Pusch Ridge Wilderness and climbs through the Wilderness of Rocks toward Mount Lemmon?

A. Passage 9 (Rincon Mountains)
B. Passage 10 (Redington Pass)
C. Passage 11 (Santa Catalina Mountains)
D. Passage 12 (Oracle Ridge)

7. Passage 11 in this stretch is also known by which name?

A. Santa Catalina Mountains
B. Rincon Mountains
C. Redington Pass
D. Oracle Ridge

8. Which passage drops from Summerhaven down Red Ridge to American Flag Ranch near Oracle?

A. Passage 10 (Redington Pass)
B. Passage 9 (Rincon Mountains)
C. Passage 8 (Rincon Valley)
D. Passage 12 (Red Ridge)

9. Passage 12 in this stretch is also known by which name?

A Redington Pass
B Santa Catalina Mountains
C Oracle Ridge
D Rincon Valley

10. Passage 8, ___, connects Davidson Canyon to Saguaro National Park, traversing the Cienega Creek Natural Preserve and Colossal Cave Mountain Park across the desert grassland approach to the Rincons.

A Happy Valley
B Rincon Valley
C Santa Catalinas
D Romero Pass

11. Passage 11, the ___, crosses the Pusch Ridge Wilderness and climbs through the Wilderness of Rocks toward Mount Lemmon and the resort village of Summerhaven. It includes a vertical-mile climb to Romero Pass.

A Rincon Mountains
B Tucson Mountains
C Tortolita Mountains
D Santa Catalina Mountains

12. Passage 12, ___, drops from Summerhaven down an exposed ridgeline to American Flag Ranch near the town of Oracle — a long, dry, shadeless descent with big eastward views.

A Red Ridge
B Samaniego Ridge
C Romero Pass
D Mica Mountain

13. Passage 9's long climb from Saguaro National Park heads up toward which peak?

A Rincon Peak, south of Mica Mountain
B Mica Mountain, in the high pine forest
C Mount Lemmon, near Summerhaven
D Mount Bigelow, in the Catalinas

14. Which wilderness area does Passage 11 cross before climbing through the Wilderness of Rocks?

A Sabino Canyon Wilderness
B Rincon Mountain Wilderness
C Oracle Ridge Wilderness
D Pusch Ridge Wilderness

15. Which protected area does Passage 8 cross on its route from Davidson Canyon to Saguaro National Park?

A Cienega Creek Natural Preserve
B Pusch Ridge Wilderness
C Bighorn Sheep Management Area
D Rincon Mountain Wilderness

16. Besides Cienega Creek Natural Preserve, which park does Passage 8 cross on the way to the Rincons?

A Catalina State Park
B Sabino Canyon Recreation Area
C Colossal Cave Mountain Park
D Oracle State Park

17. What kind of terrain and features define Passage 10, the Redington Pass connector?

- A Montane pine forest near Mica Mountain
- B Exposed ridgeline with big eastward views
- C Rolling grassland and dirt road, little shade or water
- D Granite hoodoos in a wilderness of rocks

18. Which two mountain ranges does Passage 10 (Redington Pass) connect?

- A The Santa Ritas and the Catalinas
- B The Catalinas and the Superstitions
- C The Rincons and the Chiricahuas
- D The Rincon and Santa Catalina Mountains

19. Climbing from desert scrub to conifer forest in a single day's ascent, an AZT hiker passes through the ecological equivalent of traveling between which two countries?

- A Mexico and Canada
- B Cuba and Sweden
- C Panama and Iceland
- D Guatemala and Norway

20. Roughly how many vertical feet does the trail climb from desert to forest on each sky island?

- A About 1,500 feet
- B Roughly 5,000 to 6,000 feet
- C About 9,400 feet
- D About 3,200 feet

21. How much cooler does the high country near Mount Lemmon and Summerhaven typically run than the Tucson valley floor?

- A About 50 degrees F
- B Up to 20 degrees F
- C About 5 degrees F
- D About 35 degrees F

22. The transect runs from Sonoran Desert scrub at the bottom up to what at the top of the peaks?

- A Canadian-zone conifer forest
- B Coastal chaparral
- C Alpine tundra above treeline
- D Tropical rainforest

23. What is one practical consequence for hikers of the cooler high country?

- A They carry no water on the exposed ridges
- B They skip the Rincon climb entirely
- C They avoid the pine zones in summer
- D They time the low desert passages for cool months

24. Which climb does a northbound (NOBO) hiker front-load while legs are still fresh?

- A Redington Pass
- B Oracle Ridge
- C The Rincons
- D The Wilderness of Rocks

25. A southbound (SOBO) hiker opens this stretch with which climb?

- A The Rincon Mountains climb
- B The Mica Mountain summit trail
- C The exposed Oracle Ridge climb
- D The Redington Pass crossing

26. Which statement is NOT true of hiking this stretch northbound?

A. It opens with the exposed Oracle Ridge climb
B. It passes up through every life zone to montane pine
C. It front-loads the big Rincon climb while legs are fresh
D. It finishes with the Oracle Ridge descent

27. After the high Santa Catalinas, how does a southbound hiker finish this stretch?

A. With the Wilderness of Rocks climb
B. With the long Rincon descent into the desert
C. With the climb up to Mica Mountain
D. With the Oracle Ridge descent to Oracle

28. Which is a true difference between the NOBO and SOBO experiences of this stretch?

A. SOBO front-loads the big Rincon climb while legs are fresh
B. NOBO begins with the Oracle Ridge climb, while SOBO ends with it
C. Both directions begin by crossing Redington Pass
D. NOBO ends with the Oracle Ridge descent, while SOBO begins with the Oracle Ridge climb

29. Which Rincon peak does the AZT bypass rather than summit?

A. Mica Mountain
B. Mount Bigelow
C. Rincon Peak
D. Mount Lemmon

30. To actually stand on a summit such as Mica Mountain, what must a hiker do?

A. Follow the main AZT to the top
B. Wait until winter for access
C. Take an off-trail side trip
D. Pay a summit permit fee

31. In the Santa Catalinas, the AZT stays below which high point?

A. Mount Bigelow
B. Mount Lemmon
C. Mica Mountain
D. Rincon Peak

32. Which statement about the trail's true high point is correct?

A. It is the summit of Mica Mountain
B. It is the summit of Mount Lemmon
C. It rises above both range summits
D. It sits well under the named peak elevations

33. Which statement about the AZT and the summits is NOT true?

A. It routes directly over the summit of Mount Lemmon
B. It skirts Mica Mountain without summiting
C. Reaching the summits requires off-trail detours
D. It stays below Mount Lemmon

Go deeper

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LESSON 2 OF 19

The Rincon Mountains

Rincon Valley & the climb · Mica Mountain & Manning Camp

WHAT YOU'LL BE ABLE TO DO

- Identify the Quilter and Manning Camp Trails as the AZT's Rincon climb, not Tanque Verde Ridge, and describe the Passage 8 approach.
- Recognize Colossal Cave and its Wild West train-robbery lore on the Passage 8 approach.
- Identify Mica Mountain as the Rincon high point (~8,666 ft) that the AZT skirts rather than summits.
- Describe Manning Camp as the historic high-country ranger camp (~7,920 ft) with reliable year-round water.
- Recognize Grass Shack as the designated backcountry campground that breaks the Rincon climb partway up.

Passages 8 and 9 carry the Arizona Trail from the desert floor up the Rincon Mountains — the longest, highest, and most demanding climb of this whole stretch. This lesson covers the approach across Rincon Valley and the big ascent into the high country of Saguaro National Park.

Rincon Valley and the climb

Passage 8 traverses the **Cienega Creek Natural Preserve** and **Colossal Cave Mountain Park** on its way to Saguaro National Park's eastern (Rincon Mountain) district. It's classic desert-grassland walking — golden grasses, mesquite, and saguaro — before the real climbing begins. There's a slice of Wild West lore here too: **Colossal Cave** was reputedly used as a hideout by a gang that robbed a Southern Pacific passenger train — traditionally dated to 1887, though the exact year is not confirmed — its branching passages making an ideal place to lie low.

Then the trail tilts up. Inside the park the AZT follows the **Quilter Trail**, then turns onto the **Manning Camp Trail**, which climbs past the Grass Shack campground toward Manning Camp; the park designated the Manning Camp Trail part of the Arizona National Scenic Trail in 2012. The numbers are sobering: in its first 14 miles, Passage 9 gains **over 6,000 feet** and passes through six biotic communities, from desert scrub and desert grassland through oak and pine–oak woodland to pine and mixed-conifer forest — the single biggest sustained ascent of this stretch. Don't confuse this route with the **Tanque Verde Ridge**, the long ridge in view from the Hope Camp Trail: its own park trail runs 11 miles up to Cow Head Saddle, and the AZT does not use it.

Two rules govern the Rincons. First, **dispersed camping is strictly prohibited** inside Saguaro National Park — you must camp only at designated, permitted sites, so plan your mileage carefully on a 6,000-foot climb with few legal options. Second, mind the wildlife: the notion that "there are no bears in the Rincons" is false. A healthy black bear population thrives here, scat is common along the high trail, and you'll want to store food properly at the designated camps.

Mica Mountain and Manning Camp

The high point of the Rincons is **Mica Mountain**, at roughly **8,666 feet**, topping out in cool mixed-conifer forest — a Pleistocene relic stranded far above the desert. The AZT climbs into its forested flank but, true to form, **bypasses the actual summit**: at the Mica Mountain junction the trail leaves the summit path and contours around the peak, so bagging the high point is a short off-trail side trip.

As of 2026, Saguaro National Park, whose highest point is Mica Mountain, gives the elevation range of its Rincon Mountain District as 2,670 to 8,666 feet. Other published figures for the summit differ by a few feet, from 8,664 to 8,668.

The crown jewel of the high country is **Manning Camp**, a historic ranger camp at about **7,920 feet** with a reliable year-round spring and a waterfall. It's the single most dependable water source on this stretch and the most coveted designated (permit-required) campsite in the park's backcountry — the reward at the top of the big climb for northbound hikers, and the anchor around which the long carries on either side are planned. Lower on the ascent sits **Grass Shack**, another designated backcountry campground with a seasonal water source, which lets you break the climb partway up. Both require a recreation.gov reservation, so book them before your hike — there's no legal fallback to dispersed camping in the park.

A second high summit, **Rincon Peak** (8,482 feet), rises about 7 miles south of Mica Mountain, also inside Saguaro National Park. The AZT does not go there: its route climbs north to Manning Camp and the junction just below Mica Mountain, then drops toward Redington Road. Rincon Peak is a separate climb off the trail, and its 8,482 feet is easy to confuse with Mica Mountain's roughly 8,666.

Key terms

Tanque Verde Ridge
A long, prominent ridge in Saguaro National Park's Rincon Mountain District, in view from the Hope Camp Trail. Its own park trail runs 11 miles up to Cow Head Saddle, but the AZT does not use it: the AZT climbs the Rincons by the Quilter and Manning Camp Trails.

Mica Mountain
The highest point in the Rincon Mountains, at roughly 8,666 ft. It tops out in cool mixed-conifer forest — a Pleistocene relic high above the desert. The AZT climbs into its forested flank but bypasses the actual summit.

Manning Camp
A historic ranger camp at about 7,920 ft in the high Rincons, featuring a reliable year-round spring and a waterfall. It is the single most dependable water source and a designated (permit-required) campsite in Saguaro National Park's backcountry — a crucial high-country anchor.

Grass Shack
A designated backcountry campground in Saguaro National Park along the AZT, lower on the Rincon climb than Manning Camp. It offers a seasonal water source and a permitted place to break the big ascent — reserve it through recreation.gov.

Key concepts

Colossal Cave

- A branching underground landmark on the desert-grassland approach, before the real Rincon climbing begins.
- Its maze of passages made it an ideal place to lie low.
- Legend says a gang used it as a hideout after robbing a Southern Pacific passenger train, traditionally dated to 1887 (the exact year is unconfirmed).

Tanque Verde Ridge

- A long, prominent ridge in Saguaro National Park's Rincon Mountain District, in view from the Hope Camp Trail.
- Its own park trail runs 11 miles from the trailhead up to Cow Head Saddle.
- Easy to mistake for the AZT's route, but the AZT climbs the Rincons by the Quilter and Manning Camp Trails instead.

Key facts

> **Across the Rincon Valley**
>
> Passage 8 traverses the Cienega Creek Natural Preserve and Colossal Cave Mountain Park on its way to Saguaro National Park's eastern (Rincon Mountain) district. It's classic desert-grassland walking — golden grasses, mesquite, and saguaro — before the real climbing begins.



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Six thousand feet in fourteen miles

The climb up the Rincon Mountains from the desert floor gains over 6,000 feet of elevation in just 14 miles. It is the single biggest sustained ascent of this stretch of the Arizona Trail — a desert-to-conifer transect that leaves the saguaros far below.



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An old outlaw hideout

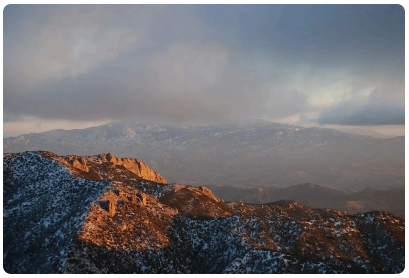
Colossal Cave, which Passage 8 passes, was reputedly used as a hideout by a gang that robbed a Southern Pacific passenger train — traditionally dated to 1887, though the exact year isn't confirmed. The cave's cool, branching passages made an ideal place to lie low — a slice of Wild West lore right on the trail. (Gang name varies by account.)

No dispersed camping in Saguaro NP

Dispersed backcountry camping is strictly prohibited inside Saguaro National Park. You must camp only at designated sites (Grass Shack, Manning Camp, and others) with a reserved permit — so plan your mileage to reach a legal site, since the long Rincon climb leaves few options in between.

Up the Manning Camp Trail

Inside Saguaro National Park, the AZT follows the Quilter Trail and then the Manning Camp Trail, which climbs past Grass Shack toward Manning Camp. The park designated the Manning Camp Trail part of the Arizona National Scenic Trail in 2012.



All Fronts Quiet · CC BY-SA 3.0

Bypassing Mica Mountain

At the Mica Mountain junction, the AZT leaves the summit trail and contours around to bypass the 8,666-foot peak. Bagging the actual high point is a short off-trail side trip — worth it for the forest and views, but not on the official route.

The high country's crown jewel

Manning Camp is a historic ranger camp in the high Rincons — the most coveted permitted campsite in the park's backcountry.

The most dependable water source

Manning Camp has a year-round spring and a waterfall, making it the single most dependable water source on this stretch of the Arizona Trail.

A Pleistocene relic

Mica Mountain, at about 8,666 feet, is the highest point in the Rincon Mountains — a Pleistocene-era relic standing far above the surrounding desert floor.

By the numbers

Elevation of Mica Mountain, the Rincon high point (ft)

8666 ft

Elevation of Manning Camp (ft)

7920 ft

Self-test

Answer each question from memory, then check your work against the answer key.

1. After the Quilter Trail, which park trail carries the AZT up the big Rincon climb past Grass Shack?

A. Italian Spring Trail
B. Manning Camp Trail
C. Oracle Ridge Trail
D. Tanque Verde Ridge Trail

2. How much elevation does the AZT's climb up the Rincon Mountains gain, and over what distance?

A. Over 6,000 feet in 14 miles
B. About 3,500 feet in 25 miles
C. Over 9,500 feet in 20 miles
D. About 2,000 feet in 8 miles

3. In which district of Saguaro National Park does the AZT make its big Rincon climb out of the desert?

A. The western, Tucson Mountain district
B. The southern, Rincon Valley district
C. The eastern, Rincon Mountain district
D. The northern, Santa Catalina district

4. On its desert-grassland approach, Passage 8 traverses Colossal Cave Mountain Park and which natural preserve?

A. San Pedro Riparian preserve
B. Empire Ranch preserve
C. Las Cienegas grassland reserve
D. Cienega Creek Natural Preserve

5. Before the big Rincon climb begins, how is the Passage 8 terrain best described?

A. Oak and pine–oak woodland
B. Dense riparian cottonwood gallery forest
C. Desert-grassland with golden grasses, mesquite, and saguaro
D. Pine and mixed-conifer forest

6. According to Wild West lore, what was Colossal Cave reputedly used for?

A. A Hohokam grain store
B. A Civil War field hospital
C. A copper mining shaft
D. A hideout after a train robbery

7. The gang tied to Colossal Cave robbed a passenger train belonging to which railroad?

A. Southern Pacific
B. Union Pacific
C. Denver & Rio Grande
D. Atchison, Topeka & Santa Fe

8. What feature of Colossal Cave made it an ideal place for the gang to lie low?

A. A single narrow cliff-guarded entrance
B. Its cool, branching passages
C. An underground river for escape
D. Its position on the Mexican border

9. On which passage of the Arizona Trail does the route pass Colossal Cave?

A. Passage 11
B. Passage 7
C. Passage 8
D. Passage 9

10. The train-robbery legend tied to Colossal Cave is traditionally dated to which year?

A 1851
B 1934
C 1912
D 1887

11. What is the approximate elevation of Mica Mountain, the high point of the Rincons?

A About 6,000 feet
B About 8,666 feet
C About 7,920 feet
D About 9,150 feet

12. What does the AZT do at the Mica Mountain junction?

A Bypasses the summit, contouring around the peak
B Forks off the main trail toward Rincon Peak instead
C Ends at the Mica Mountain summit
D Crosses directly over the summit

13. Mica Mountain is the highest point in which mountain range?

A The Rincon Mountains
B The Santa Rita Mountains
C The Huachuca Mountains
D The Santa Catalina Mountains

14. What kind of forest tops out on Mica Mountain?

A Riparian cottonwood forest
B Cool mixed-conifer forest
C Saguaro cactus desert
D Oak-juniper woodland

15. How can an AZT hiker reach the true summit of Mica Mountain?

A By a permitted technical rock climb
B By detouring down to Manning Camp first
C By taking a short off-trail side trip from the AZT
D By staying on the AZT, which crosses the summit

16. At roughly what elevation sits Manning Camp in the high Rincons?

A About 8,482 feet
B About 6,500 feet
C About 8,666 feet
D About 7,920 feet

17. What is Manning Camp?

A A fire lookout tower
B A historic ranger camp
C A former mining town
D A trailhead parking lot

18. What water features make Manning Camp so valuable to hikers?

A A rainwater cistern that empties by midsummer
B A piped campground spigot shut off each summer
C A reliable year-round spring and a waterfall
D A seasonal creek that can run dry

19. Beyond its water, what makes Manning Camp the prize at the top of the Rincon climb?

- A It's the most coveted designated campsite in the park's backcountry
- B It hands out free walk-up permits each morning
- C It sits right on the summit of Mica Mountain, the Rincon high point
- D It's the one site where dispersed camping is allowed

20. To stay overnight at Manning Camp, what must a hiker do?

- A Camp first-come, first-served
- B Pay a cash fee at the park gate
- C Get a ranger's verbal okay on arrival
- D Reserve a permit through recreation.gov

21. What is Grass Shack along the AZT in the Rincons?

- A A natural rock shelter
- B A designated backcountry campground
- C A historic homestead ruin
- D A desert spring box

22. Where does Grass Shack sit relative to Manning Camp on the Rincon climb?

- A Lower on the climb than Manning Camp
- B On the opposite side of the range
- C At the same elevation as Manning Camp
- D Higher, near the summit above Manning Camp

23. What kind of water source does Grass Shack offer?

- A No water source at all
- B A reliable year-round spring
- C A piped municipal supply
- D A seasonal water source

24. Why is Grass Shack useful to hikers on the Rincon ascent?

- A It permits dispersed camping anywhere nearby
- B It is the only water source in the whole park
- C It lets you break the big climb partway up
- D It marks the official summit of the range

25. How does a hiker secure a spot at Grass Shack?

- A Register at a summit ranger station
- B Reserve it through recreation.gov
- C Arrive first-come with no permit needed
- D Set up anywhere, since dispersed camping is allowed

Go deeper

ONLINE This lesson on the web flashfeedlearningapp.com/study-guides/azt-rincon-catalina/the-rincon-mountains

STUDY AZT: Rincons & Catalinas in the FlashFeed app flashfeedlearningapp.com/packs/azt-rincon-catalina

LESSON 3 OF 19

Redington Pass

The dry connector

WHAT YOU'LL BE ABLE TO DO

- Define Redington Pass as the low saddle (Passage 10, 13.2 mi) connecting the Rincon and Santa Catalina ranges.
- Describe the route across Redington Pass, including the switchbacks to the saddle above Molino Basin.
- Recognize the Molino Basin closure and water shut-off that makes the pass drier than the map suggests.
- Explain the Townsend's Solitaire's winter elevational migration down to the pass to feed on juniper berries.

Passage 10 is the connector — the low, hot saddle that bridges the gap between the Rincon and Santa Catalina Mountains. It lacks the drama of the big climbs, but it demands the most careful water planning of the whole stretch. This lesson covers the dry connector and its quiet rewards.

The dry connector

Passage 10 covers **13.2 miles** between Redington Road and the Gordon Hirabayashi Campground. **Redington Pass** itself is a low-elevation saddle that separates the two ranges east of Tucson — and for the hiker, it's the exposed, dry stretch where water planning matters most.

The walking starts in **low rolling grasslands** of golden bunchgrasses, granite boulders, and thistle — beautiful in the cool months and brutal in the heat, with almost no shade and long views toward the surrounding ranges. A steep set of switchbacks then climbs to a **saddle above Molino Basin**, opening panoramic views of the San Pedro River Valley to the east before the trail enters the Catalina front country.

The defining hazard here is **heat**. Extreme sun exposure and unreliable water make this the section where hikers most often misjudge their needs — carry more water than feels necessary and hike the low stretches in the cool hours. The water situation is worse than the map suggests because of a logistical trap: **Molino Basin Campground typically closes for the summer by the end of April, and its water is shut off then.** Don't count on it in the hot months — it's a key reason the carry across Redington Pass can be longer and drier than expected.

For all its harshness, the pass has its rewards, especially for off-season hikers. **Redington Pass is a renowned winter birding destination**, famous for Western and Mountain Bluebirds drawn down from the high country by the mix of grassland, juniper, and oak. Among them are **Townsend's Solitaires**, high-altitude birds that make short *elevational* migrations down to the pass in winter to feast on juniper

berries — rather than flying south, they simply drop a few thousand feet. It's a sky-island version of migration, and a quiet pleasure on an otherwise demanding connector.

Key terms

Redington Pass

A low-elevation saddle that separates the Rincon and Santa Catalina mountain ranges east of Tucson. For the AZT hiker it's the hot, dry, exposed connector between two sky islands — the section where water planning matters most.

Key facts

Redington Pass, end to end

Passage 10 covers 13.2 miles between Redington Road and the Gordon Hirabayashi Campground, bridging the gap between the Rincons and the Catalinas. Much of it is low, open, and hot, following or paralleling dirt roads through grassland.

The climb to the Molino saddle

A steep set of switchbacks ascends to a saddle above Molino Basin, opening panoramic views of the San Pedro River Valley to the east. It's the high point of the connector before the trail enters the Catalina front country.

Molino Basin shuts off in summer

Molino Basin Campground typically closes for the summer by the end of April, and its water is shut off then. Don't count on it in the hot months — a key reason the carry across Redington Pass can be longer and drier than the map suggests.



PetrifiedForestNPS (Openverse) · pdm 1.0

A winter birding hotspot

Redington Pass is a renowned winter birding destination, famous for Western and Mountain Bluebirds. The mix of grassland, juniper, and oak draws species down from the high country in the cold months — a quiet reward for off-season hikers.

Redington Pass (Passage 10)

Between the Rincons and the Catalinas, Passage 10 crosses Redington Pass — a low, rolling grassland connector with sweeping views back to the rounded Rincon Mountains. Water here is exceptionally scarce, relying on seasonal stock tanks, so it's one of the trail's classic dry carries between two sky islands.

Self-test

Answer each question from memory, then check your work against the answer key.

1. What is Redington Pass?

- A. A high alpine peak in the Santa Catalina Mountains
- B. A low saddle connecting the Rincon and Santa Catalina ranges
- C. A perennial river crossing on the San Pedro
- D. A slot canyon deep in the Rincon Wilderness

2. How long is Passage 10 across Redington Pass?

- A. 13.2 miles
- B. 21.6 miles
- C. 6.4 miles
- D. 8.5 miles

3. Passage 10 runs between Redington Road and which endpoint?

- A. Sabino Canyon trailhead
- B. Molino Basin Campground
- C. Gordon Hirabayashi Campground
- D. Colossal Cave

4. Which two mountain ranges does Redington Pass connect?

- A. The Huachuca and Dragoon Mountains
- B. The Santa Rita and Whetstone Mountains
- C. The Superstition and Mazatzal Mountains
- D. The Rincon and Santa Catalina Mountains

5. Which statement about Redington Pass (Passage 10) is NOT true?

- A. It lies east of Tucson
- B. It is a low, hot, exposed connector
- C. It is the stretch where water planning matters most
- D. It is a high, forested alpine crossing

6. A steep set of switchbacks ascends to a saddle above ___, opening panoramic views of the San Pedro River Valley to the east. It's the high point of the connector before the trail enters the Catalina front country.

- A. Molino Basin
- B. Ventana Canyon
- C. Sabino Canyon
- D. Bear Canyon

7. From the saddle above Molino Basin, the switchbacks open panoramic views of what?

- A. The Santa Cruz River Valley to the west
- B. The San Pedro River Valley to the east
- C. The Salt River Valley to the south
- D. The Gila River Valley to the north

8. The walking on Passage 10 begins in what kind of terrain?

- A. Dense ponderosa pine forest
- B. Saguaro-studded desert bajada
- C. Low rolling grasslands of golden bunchgrasses
- D. Riparian cottonwood galleries

9. Which statement about the route across Redington Pass is NOT true?

A. Past the high point it enters the Catalina front country
B. Most of the route is shaded ponderosa pine forest
C. Switchbacks climb to a saddle above Molino Basin
D. It starts out in open grassland with little shade

10. After the high point above Molino Basin, the trail enters what?

A. Saguaro National Park East
B. The Rincon Wilderness
C. The San Pedro Riparian Area
D. The Catalina front country

11. ___ typically closes for the summer by the end of April, and its water is shut off then. Don't count on it in the hot months — a key reason the carry across Redington Pass can be longer and drier than the map suggests.

A. Molino Basin Campground
B. La Selvilla Campground
C. Gordon Hirabayashi Campground
D. El Bosquecito Campground

12. When does Molino Basin Campground typically close for the season?

A. By the end of September
B. By the end of November
C. By the end of April
D. By the end of January

13. What happens to Molino Basin Campground's water when it closes for summer?

A. It is treated but flows year-round
B. It is capped at two gallons per hiker
C. It is shut off
D. It is trucked in weekly

14. Why can the carry across Redington Pass be drier than the map suggests?

A. Molino Basin's water is off in the hot months
B. The dirt road washes out every summer
C. A perennial spring was recently diverted
D. Snowmelt fills the stock tanks only in April

15. Given the Molino Basin closure, what water strategy is recommended on Redington Pass?

A. Cache water only after starting the climb
B. Carry more water than feels necessary
C. Rely on the campground spigot at the saddle
D. Plan to filter from the San Pedro River

16. ___ make short elevational migrations down to Redington Pass in winter to feast on juniper berries. Rather than flying south, these birds simply drop a few thousand feet — a sky-island version of migration.

A. Mountain Bluebirds
B. Steller's Jays
C. Yellow-eyed Juncos
D. High-altitude Townsend's Solitaires

17. What do Townsend's Solitaires come down to Redington Pass in winter to eat?

A. Juniper berries
B. Thistle seeds
C. Live oak acorns
D. Grasshoppers

18. The Townsend's Solitaire's winter movement to the pass is what kind of migration?

A. An irruptive migration driven by scarce food
B. A short elevational migration
C. A year-round nomadic wandering
D. A long north-south migration

19. Rather than flying south for winter, Townsend's Solitaires do what?

A. Climb a few thousand feet higher in elevation
B. Fly north to Canada for the winter
C. Stay on the summit ridges all winter
D. Drop a few thousand feet in elevation

20. Which statement about Townsend's Solitaires at Redington Pass is NOT true?

A. They descend to the pass to feed on juniper berries
B. They make a short elevational migration each winter
C. They fly far south to the tropics for the winter
D. They are high-altitude birds that drop a few thousand feet

Go deeper

ONLINE This lesson on the web flashfeedlearningapp.com/study-guides/azt-rincon-catalina/redington-pass

STUDY AZT: Rincons & Catalinas in the FlashFeed app flashfeedlearningapp.com/packs/azt-rincon-catalina

LESSON 4 OF 19

The Santa Catalina Mountains

Over the range · Mount Lemmon & lore

WHAT YOU'LL BE ABLE TO DO

- Describe Passage 11's 18.7-mile crossing through the Wilderness of Rocks granite country.
- Identify Romero Pass as the steep saddle reached by a vertical-mile climb, and note the equestrian bypass warning.
- Recognize Mount Lemmon (9,157 ft) as the Catalina high point the AZT stays below, named for Sara Plummer Lemmon, in the range called Babad Do'ag.
- Describe Hutch's Pool and the Pusch Ridge bighorn sheep population the passage skirts.

Passage 11 is the second great climb — up the Santa Catalinas through surreal granite country to the high forest near Mount Lemmon and the village of Summerhaven. This lesson covers the crossing and the lore of Tucson's most prominent range.

Over the range

Passage 11 spans **18.7 miles** from the Gordon Hirabayashi Campground to the Marshall Gulch Trailhead, climbing from the Catalina front country to the high forest. Near the top the trail threads the **Wilderness of Rocks** — a high area of weathered, Eocene-aged granite eroded into bizarre hoodoos, balanced boulders, and broad flat sheets of stone, one of the most distinctive landscapes on the entire Arizona Trail.

The hardest single effort is the climb to **Romero Pass**, a steep saddle reached by gaining roughly a vertical mile from the Sabino Canyon / Hutch's Pool area. It's the gateway to the upper pine forests, and the pivot point from a brutal ascent into the cool high country. Be warned that the northern end of the passage is steep, narrow, and rocky — equestrians are strongly advised to use the Pusch Ridge Wilderness Bypass, and hikers should expect slow, careful footing on loose rock.

There's deep human history here too. Near the southern end, by the **Gordon Hirabayashi Campground**, lies the site of the old **Mount Lemmon Prison Camp** — a federal honor camp that once held conscientious objectors, including Gordon Hirabayashi, who resisted the WWII incarceration of Japanese Americans and for whom the campground is now named. And a fine bit of trivia to retire a common error: **Mount Lemmon was not named after the citrus fruit.** It honors botanist Sara Plummer Lemmon, who summited it with her husband in the early 1880s on a botanical expedition.

Mount Lemmon and lore

Mount Lemmon, at **9,157 feet**, is the high point of the Santa Catalinas — but the AZT does not tag the summit. The trail stays in the forest below it; reaching the actual high point requires a side trip of roughly 6.8 miles round-trip, so the passage's on-trail high point is well under the summit elevation. The range

carries a longer name, too: the Tohono O'odham call the Catalinas **"Babad Do'ag," meaning "Frog Mountain,"** a name that predates the Spanish "Santa Catalina."

The passage skirts the **Pusch Ridge Wilderness**, home to a small remnant population of desert bighorn sheep whose fragile foothold is why parts of the range carry seasonal access restrictions. High on the mountain sits **Summerhaven**, a small resort village right on the trail at around 7,800 feet — the mid-mountain resupply with a post office, restaurants, lodging, and reliable potable water, a rare chance for a hot meal without leaving the route. And lower down, at the base of the big climb, lies **Hutch's Pool**: a deep, perennial pool fed by Sabino Creek (around 3,800 ft), a beloved swimming hole and the last sure water before the vertical-mile ascent to Romero Pass.

Key terms

Wilderness of Rocks

A high area of weathered, Eocene-aged granite that has eroded into bizarre hoodoos, balanced boulders, and broad flat sheets of stone. The AZT threads through this surreal granite landscape near the top of the Catalina climb.

Romero Pass

A steep saddle in the Santa Catalinas that the AZT crosses after climbing roughly a vertical mile up from the Sabino Canyon / Hutch's Pool area. Reaching it is the hardest single climb of the Catalina passage, the gateway to the upper pine forests.

Hutch's Pool

A deep, perennial natural pool fed by Sabino Creek (around 3,800 ft), a beloved swimming hole and reliable water source in the lower Catalinas. It marks the base of the long vertical-mile climb to Romero Pass, and tends to draw mosquitoes and moths.

Key facts

> **Rough going at the north end**
>
> The northern end of the Catalina passage is steep, narrow, and rocky. Equestrians are strongly advised to take the Pusch Ridge Wilderness Bypass instead, and hikers should expect slow, careful footing on loose rock — especially when descending tired.

> **The Mount Lemmon Prison Camp**
>
> The site of the old Mount Lemmon Prison Camp lies near the Gordon Hirabayashi Campground at the passage's southern end. The federal honor camp once held conscientious objectors — including Gordon Hirabayashi, who resisted WWII Japanese-American internment, and for whom the campground is now named.

> **Carved from ancient granite**
>
> The Wilderness of Rocks is eroded from Eocene-aged granite, weathered into hoodoos and balanced boulders — not a sedimentary or volcanic landscape.

Hoodoos and balanced boulders

Granite in the Wilderness of Rocks has eroded into bizarre hoodoos, balanced boulders, and broad, flat sheets of stone.



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The trail doesn't summit Lemmon

The AZT does not reach the 9,157-foot summit of Mount Lemmon in Passage 11 — the trail stays in the forest below it. Tagging the actual high point requires a side trip of roughly 6.8 miles round-trip, so the passage's on-trail high point is well below the summit elevation.

Summerhaven on the trail

Summerhaven, the small resort village high on Mount Lemmon, sits right on the AZT and serves as the mid-mountain resupply: a post office, restaurants, and lodging at around 7,800 feet. It's the rare chance to get a hot meal and potable water without leaving the trail.

By the numbers

Elevation of Mount Lemmon, the Catalina high point (ft)

9157 ft

Self-test

Answer each question from memory, then check your work against the answer key.

1. Passage 11 spans 18.7 miles from the ___ to the Marshall Gulch Trailhead, climbing from the Catalina front country up through the Wilderness of Rocks to the high forest near Summerhaven and Mount Lemmon.

- A Gabe Zimmerman Trailhead
- B Gordon Hirabayashi Campground
- C American Flag Ranch Trailhead
- D Molino Basin Campground

2. The Wilderness of Rocks is eroded from what kind of rock?

- A Eocene-aged granite
- B Volcanic basalt
- C Layered sandstone
- D Marine limestone

3. Which landforms characterize the Wilderness of Rocks?

A. Sand dunes and dry playas
B. Slot canyons and natural arches
C. Cinder cones and lava tubes
D. Hoodoos, balanced boulders, and flat stone sheets

4. How does the Wilderness of Rocks rank among Arizona Trail scenery?

A. The only slot-canyon section of the Arizona Trail
B. The single highest point on the Arizona Trail
C. One of the most distinctive landscapes on the entire Arizona Trail
D. The largest ponderosa forest on the Arizona Trail

5. Which is NOT true of Passage 11, the Santa Catalina crossing?

A. It threads the Wilderness of Rocks near the top
B. It climbs from the front country to the high forest
C. It passes eroded granite hoodoos and balanced boulders
D. It descends to cross the San Pedro River

6. What is Romero Pass on the Catalina passage?

A. A steep saddle and the hardest single climb
B. A granite field of hoodoos
C. A perennial swimming hole
D. A resort village with a post office

7. Roughly how much elevation is gained on the climb to Romero Pass?

A. About 800 feet
B. About 300 feet
C. About a vertical mile
D. About two vertical miles

8. At the steep northern end, which route are equestrians strongly advised to take?

A. Romero Canyon Trail
B. Pusch Ridge Wilderness Bypass
C. Marshall Gulch Trailhead
D. Sabino Canyon Road

9. The vertical-mile climb to Romero Pass rises from which area?

A. The Sabino Canyon / Hutch's Pool area
B. Gordon Hirabayashi Campground
C. Marshall Gulch
D. Summerhaven village

10. Which statement is NOT true of the passage's northern end?

A. It is narrow
B. It is rocky
C. It is wide and gently graded
D. It is steep

11. The ___ call the Santa Catalinas 'Babad Do'ag,' which translates to 'Frog Mountain.' The name long predates the Spanish 'Santa Catalina,' rooting the range in the deep Indigenous history of the Sonoran Desert.

A. Yaqui
B. Tohono O'odham
C. Hohokam
D. Chiricahua Apache

12. What is the elevation of Mount Lemmon, the Catalina high point?

A 6,400 ft
B 7,800 ft
C 8,240 ft
D 9,157 ft

13. Does the AZT tag the actual summit of Mount Lemmon?

A No, because the summit is permanently closed
B Yes, it crosses right over the summit
C No, the trail stays in the forest below it
D Yes, by way of Romero Pass

14. Mount Lemmon is named after whom?

A The lemon citrus fruit
B Missionary Eusebio Kino
C Rancher E. O. Stratton
D Botanist Sara Plummer Lemmon

15. Reaching the true summit of Mount Lemmon requires roughly how long a side trip off the AZT?

A About 11 miles round-trip
B About 6.8 miles round-trip
C About 1.2 miles round-trip
D About 19 miles round-trip

16. What is Hutch's Pool?

A A deep perennial pool fed by Sabino Creek
B A mid-mountain resort village
C A former federal prison camp
D A high granite saddle

17. At roughly what elevation does Hutch's Pool sit?

A About 5,200 ft
B About 3,800 ft
C About 9,157 ft
D About 7,800 ft

18. What role does Hutch's Pool play for hikers on the climb?

A The last sure water before the Romero Pass climb
B The passage's on-trail high point
C The mid-mountain resupply village
D The northern trailhead of the passage

19. The Pusch Ridge Wilderness holds a small remnant population of which animal?

A Mexican gray wolves
B Sonoran pronghorn
C Coues white-tailed deer
D Desert bighorn sheep

20. Why do parts of the Pusch Ridge range carry seasonal access restrictions?

A To protect nesting bald eagles
B To limit trail erosion after rain
C To protect fragile desert bighorn sheep habitat
D To reduce wildfire risk in summer

Go deeper

ONLINE This lesson on the web flashfeedlearningapp.com/study-guides/azt-rincon-catalina/the-santa-catalina-mountains

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LESSON 5 OF 19

Oracle Ridge

The exposed descent

WHAT YOU'LL BE ABLE TO DO

- Describe Passage 12's 17.8-mile exposed descent down Red Ridge and Oracle Ridge to American Flag Ranch.
- Identify the sweeping views from Oracle Ridge — the San Pedro River Valley and the Galiuro Mountains.
- Recognize American Flag Ranch and its historic territorial-era post office at the passage's northern end.
- Explain High Jinks Ranch's tie to Buffalo Bill Cody's mining interests near Oracle.

Passage 12 is the long way down — a 17.8-mile descent from the cool pines of Summerhaven along an exposed ridge to the high desert near Oracle. It's scenic, historic, and, in the heat, surprisingly punishing. This lesson covers the ridge and its landmarks.

The exposed descent

Passage 12 descends **17.8 miles** from the Marshall Gulch Trailhead down Red Ridge and Oracle Ridge to **American Flag Ranch** near the town of Oracle. The character of the walking is set by the terrain: the trail rolls across loose, rocky ground along a highly exposed ridgeline with little shade. It's mostly downhill, but long descent on loose rock in full sun is harder on the body than the elevation numbers suggest.

The defining hazard is the inverse of climbing: **temperatures rise rapidly as you lose elevation**, while shade and water disappear. A hiker descending in the afternoon can go from cool pine forest to baking grassland in a few hours, so carry enough water to cover the hot, dry bottom of the ridge. The compensation for all that exposure is the view — Oracle Ridge offers sweeping, unobstructed vistas of the **San Pedro River Valley and the Galiuro Mountains** to the east, a long high vantage over southeastern Arizona's basin-and-range country. The vegetation tells the story of the descent in reverse: plant communities shift from **montane chaparral and pine-oak at the top to high desert grasslands** near Oracle, a compressed tour from forest back down toward desert.

Two historic ranches anchor the passage's end. **American Flag Ranch**, at the northern trailhead, is home to the oldest standing territorial-era post office building in Arizona — the spot where the AZT leaves the ridge for the road toward Oracle. And along the ridge sits **High Jinks Ranch**, once tied to **Buffalo Bill Cody**, who had mining interests near Oracle late in his life. High Jinks is a waypoint with water when conditions allow, and its story links this rugged stretch of desert trail directly to Wild West folklore — the famous showman chasing gold in these very hills, his name still marking the map. It's a fitting end to a segment that began in outlaw-hideout country at Colossal Cave and finishes in Buffalo Bill's old mining ground.

Key terms

American Flag Ranch

The historic ranch at the northern end of the passage, whose building is the oldest standing territorial-era post office in Arizona. It marks the trailhead where the AZT leaves Oracle Ridge for the road toward Oracle.

High Jinks Ranch

A historic ranch along Oracle Ridge once tied to Buffalo Bill Cody, who had mining interests near Oracle. It's a waypoint with water when conditions allow, linking this stretch of desert trail directly to Wild West history.

Key concepts

Galiuro Mountains

- A distant range that fills part of the ridge's sweeping, unobstructed view to the east.
- It anchors a long, high vantage over southeastern Arizona's basin-and-range country, seen beside the San Pedro River Valley.

San Pedro River Valley

- A broad lowland forming the other half of the ridge's grand eastern panorama.
- Seen far below the exposed crest, it spreads out beside the Galiuro Mountains in a vista over basin-and-range country.

Key facts

> **Down Oracle Ridge**
>
> Passage 12 descends 17.8 miles from the Marshall Gulch Trailhead down Red Ridge and Oracle Ridge to American Flag Ranch near Oracle. It's a long, mostly downhill ridge walk that trades cool pine forest for hot high grassland.

> **An exposed ridgeline**
>
> The trail rolls across loose, rocky terrain along a highly exposed ridgeline with little shade. The footing is rough and the sun relentless — Oracle Ridge is scenic but punishing, especially in the heat of a low-elevation afternoon.

> **Temperatures climb as you descend**
>
> As the trail loses elevation toward Oracle, temperatures rise rapidly while shade and water disappear. Hikers descending in the afternoon can go from cool pine forest to baking grassland in a few hours — carry enough water to cover the dry, hot bottom of the ridge.



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Big eastward views

Oracle Ridge offers sweeping, unobstructed views of the San Pedro River Valley and the Galiuro Mountains to the east. The exposure that makes it hot also makes it spectacular — a long, high vantage over southeastern Arizona's basin-and-range country.



Moffett, Chicago · Public domain

Buffalo Bill's Oracle connection

Buffalo Bill Cody's ownership stake in the High Jinks Ranch and nearby mines ties this rugged stretch of the Arizona Trail directly to Wild West folklore. The famous showman chased gold in these hills late in life — and his name still marks the map.

Self-test

Answer each question from memory, then check your work against the answer key.

1. Passage 12 descends 17.8 miles from the ___ down Red Ridge and Oracle Ridge to American Flag Ranch near Oracle. It's a long, mostly downhill ridge walk that trades cool pine forest for hot high grassland.

- A Marshall Gulch Trailhead
- B Mount Lemmon Prison Camp
- C Wilderness of Rocks
- D Hutch's Pool

2. How long is Passage 12's descent down Red Ridge and Oracle Ridge?

- A 9.3 miles
- B 17.8 miles
- C 24.6 miles
- D 12.4 miles

3. Passage 12 descends down which two ridges toward American Flag Ranch?

- A Green Mountain and Butterfly Ridge
- B Mica Ridge and Molino Ridge
- C Samaniego Ridge and Reef Ridge
- D Red Ridge and Oracle Ridge

4. Passage 12's descent ends at which ranch near the town of Oracle?

- A High Jinks Ranch
- B Kentucky Camp
- C American Flag Ranch
- D Colossal Cave Ranch

5. Which is NOT an accurate description of Passage 12's descent?

A. Shaded, gentle switchbacks through dense forest
B. Mostly downhill but punishing in the heat
C. Loose, rocky ground underfoot
D. A highly exposed ridgeline with little shade

6. Oracle Ridge offers sweeping eastward views of which pair of features?

A. The Gila River Valley and the Chiricahua Mountains
B. The Santa Cruz Valley and the Huachuca Mountains
C. The San Simon Valley and the Rincon Mountains
D. The San Pedro River Valley and the Galiuro Mountains

7. Which mountain range is visible to the east from Oracle Ridge?

A. The Chiricahua Mountains
B. The Galiuro Mountains
C. The Santa Rita Mountains
D. The Huachuca Mountains

8. Which river valley does Oracle Ridge overlook to the east?

A. The Colorado River Valley
B. The Gila River Valley
C. The San Pedro River Valley
D. The Santa Cruz River Valley

9. In which direction do Oracle Ridge's sweeping vistas open up?

A. South
B. North
C. West
D. East

10. What quality of Oracle Ridge makes it both hot and spectacular?

A. Its dense pine canopy
B. Its exposure, with little shade
C. Its low, sheltered elevation
D. Its deep, shaded canyons

11. American Flag Ranch is home to the oldest standing territorial-era example of what building in Arizona?

A. Post office
B. Schoolhouse
C. Courthouse
D. Saloon

12. Where along Passage 12 does American Flag Ranch sit?

A. At the southern start in Summerhaven
B. At the summit of Mount Lemmon
C. At the northern end, the trailhead near Oracle
D. Midway along the exposed ridgeline

13. American Flag Ranch marks the spot where the AZT does what?

A. Crosses the San Pedro River
B. Begins the climb up to Summerhaven
C. Leaves Oracle Ridge for the road toward Oracle
D. Enters the Wilderness of Rocks

14. Which ranch on Passage 12 holds Arizona's oldest standing territorial-era post office?

A American Flag Ranch
B High Jinks Ranch
C Colossal Cave Ranch
D Kentucky Camp

15. Which statement about American Flag Ranch is NOT true?

A It sits at the passage's northern end
B It marks where the AZT leaves the ridge for Oracle
C Its building is the oldest standing territorial-era post office in Arizona
D It was owned by Buffalo Bill Cody for his mining ventures

16. High Jinks Ranch was once tied to which Wild West figure?

A Geronimo
B Buffalo Bill Cody
C Kit Carson
D Wyatt Earp

17. What kind of business interest did Buffalo Bill Cody have near Oracle?

A Cattle ranching
B Timber logging
C Mining
D Railroad building

18. When in his life did Buffalo Bill Cody pursue his mining interests near Oracle?

A Before his Wild West show began
B Late in his life
C During the Civil War
D As a teenage army scout

19. What did the famous showman chase in the hills near Oracle?

A Silver
B Copper
C Cattle
D Gold

20. Which statement about High Jinks Ranch is NOT true?

A It holds Arizona's oldest standing territorial-era post office
B It is a waypoint with reliable water
C It sits along Oracle Ridge
D It was tied to Buffalo Bill Cody

Go deeper

ONLINE This lesson on the web flashfeedlearningapp.com/study-guides/azt-rincon-catalina/oracle-ridge

STUDY AZT: Rincons & Catalinas in the FlashFeed app flashfeedlearningapp.com/packs/azt-rincon-catalina

LESSON 6 OF 19

Water Sources & Carries

The reliable sources · Dry carries & caches

WHAT YOU'LL BE ABLE TO DO

- Identify the reliable water sources of the stretch — Manning Camp, Hutch's Pool, Colossal Cave Mountain Park, and Cienega Creek.
- Recognize the seasonal sources and the longest dry carry of the segment, across Redington Pass.
- Identify High Jinks Ranch as a reliable fill low on the Oracle Ridge descent.

In the desert, water is the single most important planning factor — more than mileage, more than elevation. This stretch swings from reliable high-country springs to long, dry, exposed carries, and knowing which is which is what keeps a hike safe. This lesson maps the dependable sources and the carries to plan around.

The reliable sources

A handful of sources you can lean on. **Manning Camp** (≈7,920 ft) is the most reliable water on the whole stretch — a spring-fed, year-round source with a small waterfall in the high Rincons, and the natural anchor for planning the long carries on either side of the range. In the Catalinas, **Hutch's Pool** is a dependable perennial pool fed by Sabino Creek (≈3,800 ft), sitting at the foot of the vertical-mile climb to Romero Pass — the last sure water before that ascent. **Summerhaven** offers reliable potable town water (plus food and lodging) right on the trail high in the Catalinas, the most convenient tank-up before the dry Oracle Ridge descent. Early in the stretch, **Colossal Cave Mountain Park** usually has water at its El Bosquecito Campground and La Selvilla Picnic Area (a park fee applies), and **Cienega Creek** is a perennial stream on Passage 8 — though it needs purification and stepping off the AZT to the wider preserve requires a permit.

The single most important habit, though, is to **check the AZT Water Report** (and recent FarOut comments) before committing to any carry. Most creeks on this stretch are seasonal, and their reliability swings wildly between wet and dry years — a source that's flowing in a friend's trip report from April may be bone-dry by June.

Dry carries and caches

The creeks that *aren't* reliable matter just as much. **Rincon and Chimenea Creeks** (Passages 8–9), **Caliente Creek** (Passage 10), and **Lemmon Creek** (Passage 11) all flow only seasonally — strong after rain or snowmelt, often dry by late spring and summer, and Lemmon Creek can even freeze solid in winter. **Italian Spring**, on the northern Rincon descent, is a seasonal source of variable reliability worth verifying rather than relying on. Lower on Oracle Ridge, **High Jinks Ranch** provides a reassuring reliable fill near the end of the hot descent.

The carry that demands the most respect is the **longest dry stretch across Redington Pass** — roughly from Caliente Creek / "The Lake" to Sycamore Canyon and Hutch's Pool. The trap is that the obvious stopping points can't be counted on: **Gordon Hirabayashi Campground has no water, and Molino Basin's spigots are shut off all summer.** That means the carry ends only at the perennial Catalina pool, and you must plan to carry enough from the last good source to bridge the entire pass. Finally, on caching: if you stage water, place it **only inside the designated metal AZT bear boxes**, never loose on the ground — loose caches get destroyed by wildlife and can leach chemicals — and pack out every empty bottle, crushed flat. The bear boxes protect both your water and the animals.

Key facts

> **Water: Manning Camp**
>
> Manning Camp (≈7,920 ft) is the most reliable water on this stretch — a spring-fed, year-round source with a small waterfall in the high Rincons. For NOBO hikers it's the reward at the top of the big climb and the anchor for planning the long carries on either side.



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> **Water: Hutch's Pool**
>
> Hutch's Pool, a deep perennial pool fed by Sabino Creek (≈3,800 ft), is a dependable water source and swimming hole in the lower Catalinas. It sits at the foot of the vertical-mile climb to Romero Pass — the last sure water before the long ascent.

> **Water: Summerhaven**
>
> Summerhaven offers reliable potable town water (and food and lodging) right on the trail high in the Catalinas. It's the most convenient resupply-and-water stop of the whole stretch — a chance to tank up before the dry Oracle Ridge descent.

> **Water: Colossal Cave Park**
>
> Colossal Cave Mountain Park usually has water available at its El Bosquecito Campground and La Selvilla Picnic Area — a reliable early source on Passage 8, though a park fee applies. It's a good place to top off before entering Saguaro National Park.



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Water: Cienega Creek

Cienega Creek is a perennial stream on Passage 8 — but it requires purification, and stepping off the designated AZT route to reach the wider preserve needs a permit. Treat it as a useful but rule-bound early-season source.

Check the AZT Water Report

Most creeks on this stretch — Rincon, Chimenea, Caliente, and Lemmon among them — are seasonal and rain- or snowmelt-dependent. Always check the current AZT Water Report (and recent FarOut comments) before committing to a carry; reliability swings wildly between wet and dry years.

The seasonal creeks

Rincon Creek and Chimenea Creek (Passages 8-9), Caliente Creek (Passage 10), and Lemmon Creek (Passage 11) all flow only seasonally — strong after rain or snowmelt, often bone-dry by late spring and summer. Lemmon Creek's high-altitude flow can even freeze solid in winter. None can be counted on out of season.

Water: Italian Spring

Italian Spring, on the northern Rincon descent toward Redington Road, is a seasonal source of variable reliability. It can be a welcome top-off on the long way down from Manning Camp, but verify it in the water report rather than relying on it.



AI-generated (gpt-image-1.5)

Water: High Jinks Ranch

Water is available at the historic High Jinks Ranch on Oracle Ridge — a reliable source low on the passage, near the end of the hot descent toward American Flag Ranch and Oracle. A reassuring last fill on a dry, exposed stretch.

No water at the connector camps

Through the Redington Pass connector, the obvious stopping points can't be relied on for water: Gordon Hirabayashi Campground has none, and Molino Basin's spigots are off all summer. Plan to carry enough from the last good source to bridge the entire pass to the Catalina water.

> **Cache only in the bear boxes**
> If you stage a water cache, place it only inside the designated metal AZT bear boxes — never loose on the ground. Loose caches get destroyed by wildlife and can leach chemicals; bear boxes protect both your water and the animals. And pack out every empty bottle, crushed flat.

Matched pairs

Each item on the left goes with the one on the right.

High Jinks Ranch → Reliable water low on the Oracle Ridge descent

Longest dry carry of the segment → The stretch across Redington Pass

Self-test

Answer each question from memory, then check your work against the answer key.

1. ___ is a perennial stream on Passage 8 — but it requires purification, and stepping off the designated AZT route to reach the wider preserve needs a permit. Treat it as a useful but rule-bound early-season source.

A Tanque Verde Creek
B Rillito Creek
C Cienega Creek
D Sabino Creek

2. Which source is described as the most reliable water on the entire stretch?

A Summerhaven
B Colossal Cave Mountain Park
C Hutch's Pool
D Manning Camp

3. Which reliable source is the last sure water before the vertical-mile climb to Romero Pass?

A Colossal Cave Mountain Park
B Hutch's Pool
C Italian Spring
D Manning Camp

4. El Bosquecito Campground and La Selvilla Picnic Area provide a reliable early water source at which park?

A Colossal Cave Mountain Park
B Saguaro National Park
C Sabino Canyon
D Catalina State Park

5. Which of these is NOT one of the reliable water sources on this stretch?

A Hutch's Pool
B Colossal Cave Mountain Park
C Manning Camp
D Lemmon Creek

6. The longest dry stretch of this segment runs across what?

A Oracle Ridge
B Redington Pass
C Manning Camp
D Romero Pass

7. Gordon Hirabayashi Campground has no water; which nearby stop has its spigots shut off all summer?

A Summerhaven
B Hutch's Pool
C Molino Basin
D Sabino Canyon

8. How is Italian Spring, on the northern Rincon descent, best described?

A A seasonal source of variable reliability
B A deep perennial pool
C Reliable potable town water
D A dependable year-round spring

9. Which seasonal creek's high-altitude flow can freeze solid in winter?

A Rincon Creek
B Caliente Creek
C Chimenea Creek
D Lemmon Creek

10. The dry carry across Redington Pass ends only at which perennial water source?

A Hutch's Pool
B Molino Basin
C Manning Camp
D Italian Spring

11. What is a reliable water fill low on the Oracle Ridge descent?

A Italian Spring
B High Jinks Ranch
C Molino Basin
D Gordon Hirabayashi Campground

12. High Jinks Ranch, a reliable late fill, sits on which descent?

A Romero Pass
B The northern Rincon descent
C Oracle Ridge
D Redington Pass

13. The hot descent past High Jinks Ranch drops toward American Flag Ranch and which town?

A Summerhaven
B Superior
C Oracle
D Tucson

14. Which statement about High Jinks Ranch is FALSE?

A It sits on Oracle Ridge
B It is near the end of the hot descent
C It offers reliable water
D It is a seasonal source of variable reliability

15. After tanking up at Summerhaven for the dry Oracle Ridge descent, hikers get a reassuring last fill at which source?

A Hutch's Pool
B High Jinks Ranch
C Colossal Cave Mountain Park
D Manning Camp

Go deeper

ONLINE This lesson on the web flashfeedlearningapp.com/study-guides/azt-rincon-catalina/water-sources-and-carries

STUDY AZT: Rincons & Catalinas in the FlashFeed app flashfeedlearningapp.com/packs/azt-rincon-catalina

LESSON 7 OF 19

Elevation, Mileage & Stats

Passage mileages · Elevation profile

WHAT YOU'LL BE ABLE TO DO

- Recall the length of each of the five passages and the ~88-mile combined total.
- Identify Passage 9 (Rincon Mountains) as the longest passage in the section.
- Describe the elevation profile by recalling each passage's trail high and low points.
- Recognize that the trail's high points stay below the named summits, such as Mount Lemmon at 9,157 ft.
- Match each passage number 8-12 to its place in the section.

The numbers tell their own story of this stretch: short in miles, enormous in vertical. This lesson is the reference card for passage lengths and the elevation profile that makes a sub-90-mile segment feel like much more.

Passage mileages

Five passages make up this section, and they sum to a compact but demanding total:

- **Passage 8 (Rincon Valley):** 13.9 miles
- **Passage 9 (Rincon Mountains):** 24.3 miles — the longest
- **Passage 10 (Redington Pass):** 13.2 miles
- **Passage 11 (Santa Catalina Mountains):** 18.7 miles
- **Passage 12 (Oracle Ridge):** 17.8 miles
- **Total: 87.9 miles**

Passage 9 is both the longest and the highest, which is no coincidence — it contains the full desert-to-conifer climb of the Rincons. The flatter-sounding mileages of Passages 10 and 12 are deceptive: Redington Pass is short but brutal in the heat, and Oracle Ridge is a long, loose, exposed descent that wears on the body more than its distance implies.

Elevation profile

The vertical numbers are where this segment earns its reputation. The trail low points sit in the desert — Passage 8 tops out around 3,600 ft while Passage 9 dips as low as 3,100 ft at the foot of the Rincon climb — and the high country reaches into the conifers, with Passage 12 starting near 8,000 ft at Summerhaven before plunging to about 4,300 ft near Oracle. Passage 10 stays low and hot, ranging roughly 3,500–4,800 ft, while Passage 11 bottoms out around 3,640 ft where it drops into the West Fork of Sabino Canyon before its big climb to Romero Pass.

Two stats dominate the profile. The **single biggest climb** is the Rincon ascent on Passage 9: **over 6,000 feet of gain in about 14 miles**, from the desert floor up toward Mica Mountain's forest — nothing else on the segment matches it for sustained vertical. The **single biggest descent** is Oracle Ridge on Passage 12: **over 3,000 feet of loss** down Red Ridge and the exposed ridgeline toward Oracle. Remember, too, that the trail's true high points stay *below* the named summits — the AZT bypasses Mica Mountain (8,666 ft) and stays under Mount Lemmon (9,157 ft), so those peak elevations are landmarks beside the trail, not points the route actually reaches.

Key concepts

Passage 10

- At 13.2 miles, the shortest passage in the section.
- It stays low and hot, ranging roughly 3,500 to 4,800 feet.
- Short but brutal in the heat — the Redington Pass crossing.

Passage 11

- At 18.7 miles, one of the longer legs in the section.
- It bottoms out around 3,640 feet where it drops into the West Fork of Sabino Canyon.
- From that low point it faces a big climb to Romero Pass, crossing the Santa Catalina Mountains.

Passage 9

- Both the longest and the highest passage in the section.
- At 24.3 miles, it dips as low as 3,100 feet at the foot of a giant climb.
- It holds the single biggest ascent on the segment — over 6,000 feet of gain in about 14 miles toward Mica Mountain's forest.

Passage 12

- The section's final passage, a long, loose, exposed descent.
- At 17.8 miles, it starts near 8,000 feet at Summerhaven and plunges to about 4,300 feet.
- It holds the single biggest descent on the segment — over 3,000 feet of loss down Red Ridge toward Oracle.

Key facts

> **The biggest descent**
> The biggest sustained descent is Oracle Ridge on Passage 12 — over 3,000 feet of loss down Red Ridge and the exposed ridgeline toward Oracle. Long downhill on loose rock in the heat makes it harder on the body than the numbers suggest.

> **Peaks the trail avoids**
> Mount Lemmon, the highest point in the Santa Catalinas, reaches about 9,157 feet — yet the Arizona Trail deliberately stays below it, just as it stays under every named summit along this stretch.

> **Passage 8's low ceiling**
> Passage 8 never climbs above roughly 3,600 feet, staying low in the desert for its entire stretch of the Arizona Trail.

> **A dip in Sabino Canyon**
> Passage 11 drops to about 3,640 feet in the West Fork of Sabino Canyon, its lowest point, before climbing back up toward Romero Pass.

> **Oracle Ridge (Passage 12)**
> From Summerhaven atop the Catalinas, Passage 12 descends more than 3,000 feet down Red Ridge and Oracle Ridge toward the historic American Flag Ranch near Oracle. The exposed, south-facing ridgeline offers little shade or water — a long, hot drop off the sky island.

By the numbers

Length of Passage 8 (Rincon Valley) in miles
13.9 miles

Length of Passage 9 (Rincon Mountains) in miles
24.3 miles

Length of Passage 10 (Redington Pass) in miles
13.2 miles

Length of Passage 11 (Santa Catalina Mountains) in miles
18.7 miles

Length of Passage 12 (Oracle Ridge) in miles
17.8 miles

Total length of Passages 8-12 combined (miles)
87.9 miles

Passage 8 trail high point (ft)
3600 ft

Passage 9 trail low point (ft)
3100 ft

Passage 10 trail high point (ft)
4800 ft

Passage 11 trail low point (ft)
3640 ft

Passage 12 trail high point near Summerhaven (ft)

8000 ft

Passage 12 trail low point near Oracle (ft)

4300 ft

Self-test

Answer each question from memory, then check your work against the answer key.

1. How long is Passage 9 (Rincon Mountains)?

- A 13.9 miles
- B 17.8 miles
- C 18.7 miles
- D 24.3 miles

2. How long is Passage 8 (Rincon Valley)?

- A 13.2 miles
- B 24.3 miles
- C 13.9 miles
- D 17.8 miles

3. How long is Passage 11 (Santa Catalina Mountains)?

- A 13.9 miles
- B 18.7 miles
- C 24.3 miles
- D 17.8 miles

4. How long is Passage 12 (Oracle Ridge)?

- A 17.8 miles
- B 13.2 miles
- C 24.3 miles
- D 18.7 miles

5. What is the combined length of Passages 8 through 12?

- A 92.5 miles
- B 87.9 miles
- C 84.6 miles
- D 78.4 miles

6. Which of the five Arizona Trail passages in the Rincon-Catalina section is the longest?

- A Passage 11 (Santa Catalina Mountains)
- B Passage 8 (Rincon Valley)
- C Passage 9 (Rincon Mountains)
- D Passage 12 (Oracle Ridge)

7. The longest passage in the Arizona Trail's Rincon-Catalina section measures how many miles?

- A 13.2 miles
- B 17.8 miles
- C 18.7 miles
- D 24.3 miles

8. Which passage is longer than Passage 11 (18.7 miles)?

- A Passage 9 (Rincon Mountains)
- B Passage 12 (Oracle Ridge)
- C Passage 8 (Rincon Valley)
- D Passage 10 (Redington Pass)

9. Besides being the longest, Passage 9 is also the section's ___ passage.

A) driest
B) flattest
C) lowest
D) highest

10. Why is Passage 9 both the longest and the highest passage?

A) It drops into the West Fork of Sabino Canyon
B) It contains the full desert-to-conifer Rincon climb
C) It stays low and hot through Redington Pass
D) It follows Oracle Ridge's exposed descent

11. How low does Passage 9 dip at the foot of the Rincon climb?

A) About 3,100 ft
B) About 4,300 ft
C) About 4,800 ft
D) About 3,640 ft

12. Passage 12 starts near what elevation at Summerhaven?

A) About 4,300 ft
B) About 4,800 ft
C) About 8,000 ft
D) About 3,640 ft

13. Passage 10 (Redington Pass) tops out around what elevation?

A) About 4,800 ft
B) About 3,600 ft
C) About 3,500 ft
D) About 4,300 ft

14. Passage 8 tops out around what elevation?

A) About 3,100 ft
B) About 3,600 ft
C) About 8,000 ft
D) About 4,800 ft

15. Passage 11 bottoms out near what elevation in the West Fork of Sabino Canyon?

A) About 8,000 ft
B) About 4,800 ft
C) About 4,300 ft
D) About 3,640 ft

16. Mount Lemmon — the Santa Catalina summit the AZT stays below — reaches roughly what elevation?

A) 7,920 ft
B) 8,666 ft
C) 9,157 ft
D) 8,000 ft

17. Which named summit in the Arizona Trail's Rincon-Catalina section is the highest?

A) Mica Mountain
B) Mount Lemmon
C) Rincon Peak
D) Mount Wrightson

18. Mica Mountain, the Rincon summit the trail bypasses, reaches about what elevation?

A) 7,920 ft
B) 9,157 ft
C) 8,000 ft
D) 8,666 ft

19. Which two named summits does the AZT stay below in the Rincon-Catalina section?

A Picacho Peak and Rincon Peak
B Mount Wrightson and Mount Graham
C Mica Mountain and Mount Lemmon
D Humphreys Peak and Baboquivari Peak

20. Relative to the named summits, the AZT's true high points stay ___ them.

A below
B just over
C exactly level with
D above

21. Which passage covers the Santa Catalina Mountains?

A Passage 8
B Passage 12
C Passage 9
D Passage 11

22. Passage 10 is known as which pass?

A Redington Pass
B Oracle Ridge
C Romero Pass
D Rincon Valley

23. Passage 8 traverses which area?

A Oracle Ridge
B Rincon Mountains
C Rincon Valley
D Redington Pass

24. Oracle Ridge is which passage number?

A Passage 9
B Passage 12
C Passage 11
D Passage 10

25. Which passage-to-place pairing is INCORRECT?

A Passage 9 is the Rincon Mountains
B Passage 10 is Redington Pass
C Passage 11 is Oracle Ridge
D Passage 8 is Rincon Valley

Go deeper

ONLINE This lesson on the web flashfeedlearningapp.com/study-guides/azt-rincon-catalina/elevation-mileage-and-stats

STUDY AZT: Rincons & Catalinas in the FlashFeed app flashfeedlearningapp.com/packs/azt-rincon-catalina

LESSON 8 OF 19

Trailheads & Access

Getting on and off trail

WHAT YOU'LL BE ABLE TO DO

- Identify the southern access points — the Gabe Zimmerman Trailhead at Davidson Canyon and the Loma Alta Trailhead.
- Describe the Redington Road crossing as a remote, waterless, high-clearance hitch point between the ranges.
- Identify the northern access points — the Marshall Gulch Trailhead and the American Flag Ranch Trailhead near Oracle.

Whether you're thru-hiking the segment or section-hiking a piece of it, knowing the access points — and how they connect — is essential. This lesson runs south to north through the trailheads that get you on and off this stretch.

Getting on and off trail

At the southern end, the **Gabe Zimmerman Trailhead at Davidson Canyon** is the gateway to Passage 8: take I-10 to Exit 279 (Wentworth Road/Colossal Cave Road), turn east 0.2 mile to the Frontage Road, then south on the Frontage Road about 5.2 miles to the parking area. The trail runs continuously north from here into Rincon Valley. Mid-passage, **Colossal Cave Mountain Park** (via Old Spanish Trail) offers an access point with water and a resupply connection, though a park fee applies and stopping hikers must use the designated campgrounds.

Access into the Rincons proper is awkward by design — this is wilderness. The **Loma Alta Trailhead** (off Old Spanish Trail via Camino Loma Alta) reaches the Saguaro National Park boundary, but there's no direct vehicle access to the AZT: it takes about a 3-mile hike east on the Hope Camp Trail to connect, and parking is limited. On the far side of the Rincons, the trail crosses **Redington Road** near mile marker 12, where Tanque Verde Road has become rough dirt — a remote, exposed spot often used as a hitch point into Tucson, but high-clearance is wise and there's no water.

The Catalina passages are bracketed by two key trailheads. The **Gordon Hirabayashi Campground**, just off the Catalina Highway past Molino Basin, is the boundary between Passages 10 and 11 — the trail transitions continuously here from Redington Pass into the high Catalinas, though there's no water at the camp. At the top, the **Marshall Gulch Trailhead** (at the end of the road about 1.5 miles south of Summerhaven) marks the boundary between Passages 11 and 12, with paved access and parking — the high gateway between the Catalina crossing and the Oracle Ridge descent. Finally, the **American Flag Ranch Trailhead** near Oracle is the northern access: from town, take American Avenue to Mount Lemmon Road about 4 miles, then turn onto American Flag Ranch Road to the dead-end parking near the historic ranch.

One logistical note worth flagging: **Summerhaven** sits between the two high-country passages and links them via short road walks when trail reroutes are in effect — construction near Marshall Gulch has periodically required a detour through town. Always check current AZT Association notices for active reroutes before tackling this section, since the connection through the village can change from year to year.

Key concepts

Gabe Zimmerman Trailhead

- The southern gateway onto this whole segment, at the start of Passage 8.
- Reached via I-10 Exit 279 (Wentworth Road/Colossal Cave Road) and the Frontage Road, about 5.2 miles south to the parking area.
- From this Davidson Canyon access, the trail runs continuously north into Rincon Valley.

Loma Alta Trailhead

- An awkward-by-design access into the Rincon wilderness, off Old Spanish Trail.
- It reaches the Saguaro National Park boundary, but with no direct vehicle access to the AZT.
- From here it's about a 3-mile hike east on the Hope Camp Trail to connect, and parking is limited.

Marshall Gulch Trailhead

- A paved-access trailhead high in the Catalinas, marking a passage boundary.
- It sits at the end of the road, about 1.5 miles south of Summerhaven.
- The high gateway between the Catalina crossing and the Oracle Ridge descent — the Passage 11/12 line.

American Flag Ranch Trailhead

- The northern access point for this segment, near the town of Oracle.
- From town, take American Avenue to Mount Lemmon Road, continuing about 4 miles toward the access.
- Dead-end parking beside a historic property, where the AZT leaves singletrack for the road toward Oracle.

Passage 8

- The section's opening stretch, running through Rincon Valley.
- At 13.9 miles, one of the shorter legs, heading north from the Gabe Zimmerman Trailhead.
- Its high point tops out around 3,600 feet — pure low-desert walking.

Colossal Cave Mountain Park

- An early trailside stop on Passage 8 that usually has water, though an entry fee applies.
- It has established campgrounds and a picnic area where hikers fill up before the Rincons.
- Stopping hikers must use its designated campgrounds; it also offers a resupply connection.

Key facts

Trailhead: Gabe Zimmerman (Davidson Canyon)

The Gabe Zimmerman Trailhead at Davidson Canyon is the southern access for this stretch: take I-10 to Exit 279 (Wentworth Road/Colossal Cave Road), turn east 0.2 mile to the Frontage Road, then south on the Frontage Road about 5.2 miles to the parking area. The trail runs continuously north from here into Rincon Valley.



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Trailhead: Colossal Cave Mountain Park

Colossal Cave Mountain Park, reached via Old Spanish Trail, is a mid-Passage-8 access point and water/resupply connection. A park fee is required to enter and park, and hikers stopping there must use the designated campgrounds.



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Trailhead: Loma Alta (Saguaro NP East)

The Loma Alta Trailhead (off Old Spanish Trail via Camino Loma Alta) accesses the Saguaro National Park boundary, but there's no direct vehicle access to the AZT — it takes about a 3-mile hike east on the Hope Camp Trail to connect. Parking is limited.

Trailhead: Redington Road

Tanque Verde Road becomes Redington Pass Road (dirt after about mile 3); the AZT crosses near mile marker 12. It's a rough, exposed access often used as a hitch point into Tucson, but high-clearance is wise and there's no water.

Trailhead: Gordon Hirabayashi

The Gordon Hirabayashi Campground, just off the Catalina Highway past Molino Basin (turn west about 0.3 miles to parking), is the boundary between Passages 10 and 11. The trail transitions continuously here from Redington Pass into the high Catalinas — but there's no water at the camp.

> **Trailhead: Marshall Gulch**
> The Marshall Gulch Trailhead, at the end of the road about 1.5 miles south of Summerhaven, marks the boundary between Passages 11 and 12. It has paved access and parking — the high-point gateway between the Catalina crossing and the Oracle Ridge descent.

> **Trailhead: American Flag Ranch**
> The northern access is the American Flag Ranch Trailhead near Oracle: from town, take American Avenue to Mount Lemmon Road about 4 miles, then turn onto American Flag Ranch Road to the dead-end parking near the historic ranch.

> **Connecting through Summerhaven**
> Summerhaven sits between the two high-country passages and links them via short road walks when trail reroutes are in effect (construction near Marshall Gulch has periodically required a detour through town). Always check current AZT Association notices for active reroutes before hiking the Rincon-Catalina section.

Self-test

Answer each question from memory, then check your work against the answer key.

1. Which trailhead is the southern access point at Davidson Canyon for this stretch of the AZT?

- A Gabe Zimmerman Trailhead
- B Loma Alta Trailhead
- C Marshall Gulch Trailhead
- D American Flag Ranch Trailhead

2. Which I-10 exit do you take to reach the Gabe Zimmerman Trailhead?

- A Exit 291 (Marsh Station Road)
- B Exit 306 (Mescal)
- C Exit 297 (Houghton Road)
- D Exit 279 (Wentworth Road/Colossal Cave Road)

3. The Loma Alta Trailhead has no direct vehicle access to the AZT. How do hikers connect to the trail from there?

- A A 1.5-mile road walk from Summerhaven
- B A short spur directly from the parking lot
- C About a 3-mile hike east on the Hope Camp Trail
- D About a 4-mile drive up Camino Loma Alta

4. The Loma Alta Trailhead reaches the boundary of which protected area?

- A Coronado National Forest
- B Saguaro National Park
- C Colossal Cave Mountain Park
- D Catalina State Park

5. Which statement about the southern access points is NOT accurate?

A. From Gabe Zimmerman the trail runs continuously north into Rincon Valley
B. Parking at the Loma Alta Trailhead is limited
C. The Gabe Zimmerman Trailhead sits at Davidson Canyon
D. The Loma Alta Trailhead offers direct vehicle access to the AZT

6. ___ becomes Redington Pass Road (dirt after about mile 3); the AZT crosses near mile marker 12. It's a rough, exposed access often used as a hitch point into Tucson, but high-clearance is wise and there's no water.

A. American Avenue
B. Tanque Verde Road
C. Mount Lemmon Road
D. Hope Camp Trail

7. The Redington Road crossing sits in the gap between which two mountain ranges?

A. The Tortolitas and the Rincons
B. The Catalinas and the Santa Ritas
C. The Rincons and the Catalinas
D. The Rincons and the Santa Ritas

8. Why is a high-clearance vehicle advised for reaching the Redington Road crossing?

A. The road becomes rough dirt past about mile 3
B. It fords a deep creek near the crossing
C. Large boulders are embedded across the roadbed
D. It crosses several deep sandy washes near the pass

9. What does the remote Redington Road crossing notably lack?

A. A shuttle stop
B. Water
C. A ranger station
D. A shaded campground

10. What is the Redington Road crossing commonly used for?

A. As a hitch point into Tucson
B. As the boundary between Passages 11 and 12
C. As a paved trailhead with a large parking lot
D. As a reliable water resupply stop

11. The northern access is the ___ near Oracle: from town, take American Avenue to Mount Lemmon Road about 4 miles, then continue on the ranch access road to the dead-end parking near the historic ranch.

A. Gabe Zimmerman Trailhead
B. Marshall Gulch Trailhead
C. American Flag Ranch Trailhead
D. Loma Alta Trailhead

12. Which trailhead marks the boundary between Passages 11 and 12?

A. Gordon Hirabayashi Campground
B. Gabe Zimmerman Trailhead
C. American Flag Ranch Trailhead
D. Marshall Gulch Trailhead

13. The Marshall Gulch Trailhead sits about 1.5 miles south of which community?

A. Vail
B. Tucson
C. Summerhaven
D. Oracle

14. The road to the American Flag Ranch Trailhead near Oracle ends at what?

- A Dead-end parking near the historic ranch
- B A paved shuttle terminal
- C A staffed visitor center lot
- D A fee booth and campground

15. From the town of Oracle, which road do you follow first toward the American Flag Ranch Trailhead?

- A Marsh Station Road
- B American Avenue
- C Catalina Highway
- D Old Spanish Trail

Go deeper

ONLINE This lesson on the web flashfeedlearningapp.com/study-guides/azt-rincon-catalina/trailheads-and-access

STUDY AZT: Rincons & Catalinas in the FlashFeed app flashfeedlearningapp.com/packs/azt-rincon-catalina

LESSON 9 OF 19

Campsites & Permits

Where to camp · Permits & rules

WHAT YOU'LL BE ABLE TO DO

- Identify the established campgrounds along the stretch — Colossal Cave's El Bosquecito and La Selvilla, and Molino Basin.
- Explain Saguaro National Park's requirement to reserve designated backcountry sites through recreation.gov.
- Recognize the fee and off-trail permit rules for Colossal Cave Mountain Park and the Cienega Creek Natural Preserve.

Where you sleep on this stretch is tightly constrained — especially in Saguaro National Park, where the rules are strict and the permits competitive. This lesson covers the legal campsites and the permits and regulations that govern them.

Where to camp

Early in the segment, **Colossal Cave Mountain Park** offers two established sites with reliable park water: **El Bosquecito** and **La Selvilla** campgrounds. Both require a park fee, but they're convenient places to stage the long Rincon climb before entering the national park.

Inside Saguaro National Park, your options are the designated backcountry sites and nothing else. **Grass Shack** breaks the big Rincon climb partway up and has a seasonal water source; **Manning Camp** (≈7,920 ft) is the premier high-country site, with a reliable year-round spring. Both require a **recreation.gov permit**, and Manning Camp is the most coveted reservation on the stretch — book early. Once you're out of the park near the Passage 9/10 boundary, dispersed camping becomes legal again on the surrounding Coronado National Forest land around **Redington Road** (no permit, but no water). Through the connector and into the Catalinas, **Molino Basin Campground** is an established Forest Service site with seasonal water — but its spigots are off and it closes for the summer by the end of April. The **Gordon Hirabayashi Campground** at the Passage 10/11 boundary needs no special trail permit but has no water, making it a staging point you must carry water into. And **Hutch's Pool** (≈3,800 ft) is a popular dispersed site beside its perennial pool — water, a swimming hole, and shade at the base of the climb to Romero Pass.

Permits and rules

The single most important rule is Saguaro National Park's: it **strictly enforces backcountry permits and reservations** for its designated sites, including Manning Camp and Grass Shack, all booked through recreation.gov. There is **no legal dispersed camping** in the park, so a permit is mandatory to overnight in the Rincons — and because options are limited on a 6,000-foot climb, you must plan daily

mileage to reach a designated site. That planning is the difference between a legal camp and a long, exhausted push.

A few other rules round out the picture. The **Cienega Creek Natural Preserve** requires a Pima County permit if you step off the designated AZT route. **Colossal Cave Mountain Park** has a camping fee and requires hikers who stop to stay in its designated campgrounds, La Selvilla or El Bosquecito. Leave-No-Trace is non-negotiable on this heavily-used corridor: there's **no trash service**, so empty water bottles left at caches must be crushed flat and packed out. And on timing — the **best seasons are fall, winter, and spring**, anything to avoid the deadly summer heat of the low desert passages; spring and fall best balance manageable desert temperatures against passable, non-snowbound high country.

Key concepts

Molino Basin Campground

- An established Forest Service site with seasonal water, in the connector into the Catalinas.
- Its spigots are shut off and it closes for the summer by the end of April.
- One of the unreliable stops on the long dry carry — don't count on its water in the heat.

El Bosquecito

- One of two established campgrounds at Colossal Cave Mountain Park, with reliable park water.
- It requires a park fee but is a convenient place to stage the long Rincon climb.
- Set just before the national park boundary, it pairs with La Selvilla as the pre-Rincon options.

Key facts

> **Camp: El Bosquecito**
> El Bosquecito Campground in Colossal Cave Mountain Park (Passage 8) offers reliable park water and a legal place to camp early in the stretch. A park fee is required, but it's a convenient, established site before the Rincon climb.

> **Camp: La Selvilla**
> La Selvilla Campground, also in Colossal Cave Mountain Park (Passage 8), has reliable park water and a fee. Like El Bosquecito, it's a dependable early stop with facilities — useful for staging the long ascent into Saguaro National Park.

> **Camp: Grass Shack**
> Grass Shack (Passage 9) is a designated Saguaro National Park backcountry site that requires a recreation.gov permit. It has a seasonal water source and breaks the big Rincon climb partway up — reserve it in advance, since dispersed camping is banned in the park.



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Camp: Manning Camp

Manning Camp (≈7,920 ft, Passage 9) is the premier high-country site: a reliable year-round spring, and a designated Saguaro NP backcountry camp requiring a recreation.gov permit. It's the most coveted reservation on the stretch — book early.

Camp: Redington Road dispersed

Near the Passage 9/10 boundary around Redington Road, dispersed camping is allowed on the surrounding Coronado National Forest land with no permit — but there's no water. It's a legal, primitive option once you're out of Saguaro National Park's no-dispersed-camping zone.

Camp: Molino Basin

Molino Basin Campground (Passage 10) is an established Forest Service site with seasonal water — but the spigots are shut off and the campground typically closes for the summer by the end of April. Don't rely on it for water in the hot months.

Camp: Gordon Hirabayashi

The Gordon Hirabayashi Campground at the Passage 10/11 boundary is an established site requiring no special trail permit, but it has no water. It's a convenient staging point for the Catalina climb — just be sure you've carried enough water in.

Camp: Hutch's Pool

Hutch's Pool (≈3,800 ft, Passage 11) is a popular dispersed campsite beside a perennial pool fed by Sabino Creek — water, a swimming hole, and shade. It sits at the base of the vertical-mile climb to Romero Pass, making it a natural place to camp before the big ascent.



Joe Parks from Berkeley, CA · CC BY 2.0

Saguaro NP backcountry permits

Saguaro National Park strictly enforces backcountry permits and reservations for its designated sites, including Manning Camp and Grass Shack. Reserve through recreation.gov before your hike — there is no legal dispersed camping in the park, so a permit is mandatory to overnight in the Rincons.



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Cienega Creek permit

The Cienega Creek Natural Preserve requires a permit if you step off the designated Arizona Trail route. Through-hikers staying on the AZT are fine, but exploring the wider preserve — or camping there — needs the proper Pima County permit.

Colossal Cave fees

Colossal Cave Mountain Park charges an entry fee and requires hikers to stay in designated campgrounds if they stop there. Budget for the fee if you plan to use its water or camp — it's a county park, not free public land.

Best seasons to hike

The best windows for this stretch are fall, winter, and spring — anything to avoid the deadly summer heat of the low desert passages. Spring and fall balance manageable desert temperatures with passable (not snowbound) high country; mid-summer is dangerous below the pines.

Plan to reach a legal camp

Because Saguaro National Park forbids dispersed camping, you must plan daily mileage to reach a designated site — Grass Shack or Manning Camp — within the park. On a 6,000-foot climb with limited options, that planning is the difference between a legal camp and a long, exhausted push.

Matched pairs

Each item on the left goes with the one on the right.

Saguaro NP backcountry permits → Reserved through recreation.gov before the hike

Colossal Cave Mountain Park → Charges an entry fee for hikers who stop there

Self-test

Answer each question from memory, then check your work against the answer key.

1. ___ in Colossal Cave Mountain Park (Passage 8) offers reliable park water and a legal place to camp early in the stretch. A park fee is required, but it's a convenient, established site before the Rincon climb.

A. El Bosquecito Campground
B. Grass Shack Campground
C. Molino Basin Campground
D. Gordon Hirabayashi Campground

2. ___, also in Colossal Cave Mountain Park (Passage 8), has reliable park water and a fee. Like El Bosquecito, it's a dependable early stop with facilities — useful for staging the long ascent into Saguaro National Park.

A. Grass Shack
B. Manning Camp
C. Molino Basin Campground
D. La Selvilla Campground

3. El Bosquecito and La Selvilla campgrounds are both located in which park along the early part of this stretch?

A. Saguaro National Park
B. Coronado National Forest
C. Colossal Cave Mountain Park
D. Cienega Creek Natural Preserve

4. Molino Basin Campground typically shuts its spigots and closes for the summer by the end of which month?

A. February
B. April
C. June
D. September

5. Which of these is NOT an established campground on this stretch, but rather a popular dispersed site?

A. Hutch's Pool
B. La Selvilla
C. El Bosquecito
D. Molino Basin

6. How must hikers reserve Saguaro National Park's designated backcountry sites like Manning Camp?

A. By walking up at the trailhead
B. With a Pima County permit
C. Through recreation.gov
D. At a Coronado Forest ranger station

7. Which two designated Saguaro National Park backcountry sites require a recreation.gov permit?

A. El Bosquecito and La Selvilla
B. Manning Camp and Grass Shack
C. Redington Road and Gordon Hirabayashi
D. Molino Basin and Hutch's Pool

8. Why is a reserved permit mandatory to overnight in the Rincons within Saguaro National Park?

A Fires require a separate permit
B The park closes to hikers at night
C Water is sold only at reserved sites
D There is no legal dispersed camping in the park

9. Which statement about camping in Saguaro National Park is FALSE?

A Manning Camp and Grass Shack are designated sites
B Manning Camp is the most coveted reservation
C Dispersed camping is allowed once you get a permit
D Reservations are made through recreation.gov

10. Manning Camp is the most coveted reservation on the stretch. What should hikers do about it?

A Reserve it early, well before the hike
B Claim it on arrival at the site
C Book it through Pima County
D Skip a reservation if you arrive early in the day

11. The Cienega Creek Natural Preserve requires a permit from which authority if you step off the designated AZT route?

A Coronado National Forest
B Pima County
C The National Park Service
D recreation.gov

12. What does Colossal Cave Mountain Park require of hikers who stop there?

A Nothing — dispersed camping is free
B Carry a Pima County off-trail permit
C Obtain a recreation.gov backcountry permit
D Pay an entry fee and stay in designated campgrounds

13. When does the Cienega Creek Natural Preserve permit requirement kick in for a hiker?

A Only during the summer months
B For every through-hiker on the trail
C When stepping off the designated AZT route
D Whenever drawing water from the creek

14. Which statement about fees and permits at Colossal Cave Mountain Park and the Cienega Creek Natural Preserve is correct?

A Colossal Cave charges a camping fee; Cienega Creek requires a permit to step off the AZT
B Colossal Cave charges a camping fee; Cienega Creek requires a permit for all AZT hikers
C Colossal Cave requires a permit to step off the AZT; Cienega Creek charges a camping fee
D Colossal Cave has no fee; Cienega Creek requires a permit to step off the AZT

15. Which of these actions on the stretch requires paying a fee?

A Staging at Gordon Hirabayashi Campground
B Stopping to camp or use water at Colossal Cave
C Staying on the AZT through Cienega Creek
D Camping at the Redington Road dispersed site

Go deeper

ONLINE This lesson on the web flashfeedlearningapp.com/study-guides/azt-rincon-catalina/campsites-and-permits

STUDY AZT: Rincons & Catalinas in the FlashFeed app flashfeedlearningapp.com/packs/azt-rincon-catalina

LESSON 10 OF 19

Navigation & Junctions

Rincon & Redington junctions · Catalina & Oracle junctions

WHAT YOU'LL BE ABLE TO DO

- Sequence the Rincon-climb junctions: the Quilter Trail, the Manning Camp Trail, the Mica Mountain junction, and the Italian Spring Trail.
- Sequence the Catalina crossing junctions: West Fork of Sabino Canyon, the Hutch's Pool side trail, Romero Pass, and Wilderness of Rocks.
- Describe the transition onto Oracle Ridge: Marshall Saddle, the Oracle Ridge Trail, and American Flag Ranch Road.
- Recognize the named trails the AZT joins across the stretch.

The AZT through this stretch stitches together many named trails, and a few junctions are easy to miss — especially where the route leaves a road or a side trail drops unsigned to water. This lesson walks the key turns, south to north.

Rincon & Redington junctions

The Rincon climb is a sequence of trail handoffs. At the **Saguaro National Park boundary**, the AZT joins the **Quilter Trail** to enter the Rincon Mountain District — the transition from the desert-valley approach onto the park's trail system. It then turns onto the **Manning Camp Trail** for the long climb past Grass Shack toward Manning Camp; the park designated this trail part of the Arizona National Scenic Trail in 2012. Keep **Cow Head Saddle** off your mental map of the route: it sits at the top of the separate Tanque Verde Ridge Trail, and the AZT never passes it.

Near the top comes a junction worth knowing: at the **Mica Mountain junction**, the AZT leaves the summit trail to bypass the roughly 8,666-foot peak (sources vary slightly, from about 8,664 to 8,668 ft), contouring through the forest — peak-baggers peel off here for a short out-and-back. Descending the far side, the trail joins the **Italian Spring Trail** to work down toward Redington Road. Two spots invite navigation errors on the connector: at the **Redington Road crossing**, the AZT leaves the dirt road at the top of a small ridge (easy to miss if you're following the road by habit), and at the **Gordon Hirabayashi Campground**, a short 40-yard path joins the AZT at a "T" intersection linking the trailhead to the main trail.

Catalina & Oracle junctions

The Catalina crossing has its own sequence. In **Sabino Canyon**, the AZT joins the **West Fork of Sabino Canyon Trail**, following the drainage upstream toward the base of the big climb. A notorious gotcha awaits near **Hutch's Pool**, where an inconspicuous, unsigned side trail leaves the AZT to reach the water — hikers regularly walk right past it. After the vertical-mile ascent, the trail turns at **Romero Pass** toward

the high pine forests, then joins the **Wilderness of Rocks Trail** to wind among the granite hoodoos below Mount Lemmon.

At the top of the range, the route transitions toward the descent. At **Marshall Saddle** the AZT leaves the Marshall Gulch area and begins working toward Oracle Ridge — though note that construction reroutes near Summerhaven have at times redirected this connection via town roads, so where the route **passes through Summerhaven** it may briefly follow village roads (a short, well-signed road walk, and a chance to detour for food and water). From there the trail leaves Red Ridge and turns onto the **Oracle Ridge Trail** for the long, exposed descent. At the northern terminus, the AZT finally leaves the trail and joins **American Flag Ranch Road** near the historic ranch — the handoff from singletrack to the road approach toward Oracle. Because reroutes recur on this section, always cross-check current AZT Association notices against your map before you go.

Key concepts

Quilter Trail

- The named trail the AZT picks up to leave the desert-valley approach and enter the park's trail system.
- You join it right at the Saguaro National Park boundary, at the very start of the Rincon climb.
- It carries the route into the Rincon Mountain District before the long climb on the Manning Camp Trail.

Manning Camp Trail

- The park trail the AZT turns onto after the Quilter Trail for the long Rincon climb.
- It passes the Grass Shack campground on the way up to the high country.
- Saguaro National Park designated it part of the Arizona National Scenic Trail in 2012.

West Fork of Sabino Canyon Trail

- Down in the canyon bottom, the AZT picks up this trail and follows the water upstream.
- It threads the drainage toward the foot of the vertical-mile climb.
- From it, the route begins the ascent to Romero Pass.

Wilderness of Rocks Trail

- High in the Catalinas past Romero Pass, the AZT joins this trail.
- It winds among granite hoodoos in the pine forest.
- The route threads these formations below Mount Lemmon before the Oracle Ridge descent.

Key facts

> **Joining the Quilter Trail**
>
> At the Saguaro National Park boundary, the AZT joins the Quilter Trail to begin its route into the Rincon Mountain District. It's the handoff from the desert-valley approach onto the park's trail system.

Leaving the Mica summit trail

At the Mica Mountain junction, the AZT leaves the summit trail to bypass the roughly 8,666-foot peak (sources vary slightly, from about 8,664 to 8,668 ft), contouring through the forest instead. Hikers wanting the high point peel off here for a short out-and-back.

Onto the Italian Spring Trail

On the northern Rincon descent, the AZT joins the Italian Spring Trail to work its way down toward Redington Road. It's the start of the long drop off the back side of the range.

Leaving the dirt road

At the Redington Road crossing, the AZT leaves the dirt road at the top of a small ridge — an easy spot to miss if you're following the road by habit. Watch for the trail markers where singletrack peels off.

The Gordon Hirabayashi T-junction

At the Gordon Hirabayashi Campground, a short 40-yard path joins the AZT at a 'T' intersection. It's the brief connector linking the campground/trailhead to the main trail as you move from Redington Pass into the Catalinas.

Up the Manning Camp Trail

From the Quilter Trail, the AZT turns onto the Manning Camp Trail for the long climb past Grass Shack toward Manning Camp. The park designated the Manning Camp Trail part of the Arizona National Scenic Trail in 2012.

Into the West Fork of Sabino

In Sabino Canyon, the AZT joins the West Fork of Sabino Canyon Trail, following the drainage upstream toward Hutch's Pool and the base of the big Catalina climb.

The inconspicuous Hutch's Pool spur

Near Hutch's Pool, a notoriously inconspicuous side trail leaves the AZT to reach the water. Hikers regularly walk past it — if you want to fill up or swim, watch carefully for the unsigned spur down to the pool.

Turning at Romero Pass

At Romero Pass, after completing the vertical-mile climb from the Sabino/Hutch's Pool area, the AZT turns toward the high pine forests. The pass is the pivot point from the brutal ascent into the cool upper Catalinas.

Through the Wilderness of Rocks

In the high Catalinas, the AZT joins the Wilderness of Rocks Trail, winding among the granite hoodoos and slabs near the top of the range. It's the scenic granite heart of the passage below Mount Lemmon.

Marshall Saddle

At Marshall Saddle, the AZT leaves the Marshall Gulch area and begins the transition toward the Oracle Ridge descent. (Note: construction reroutes near Summerhaven have at times redirected this connection via town roads — check current notices.)



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Through Summerhaven

Where the route passes Summerhaven, the AZT briefly follows village roads to link the trail segments. It's a short, well-signed road walk — and a chance to detour a few steps for food and water — before rejoining singletrack.



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Onto the Oracle Ridge Trail

Below Summerhaven, the AZT descends Red Ridge, then turns onto the Oracle Ridge Trail for the long, exposed descent toward Oracle. From here it's a committing ridgeline walk with little shade or water.

Onto American Flag Ranch Road

At the northern terminus of the passage, the AZT leaves the trail and joins American Flag Ranch Road near the historic ranch — the handoff from singletrack to the road approach toward Oracle and the next passage.

Self-test

Answer each question from memory, then check your work against the answer key.

1. At the ___ boundary, the AZT joins the Quilter Trail to begin its route into the Rincon Mountain District. It's the handoff from the desert-valley approach onto the park's trail system.

- A Saguaro National Park
- B Pusch Ridge Wilderness
- C Santa Catalina Mountains
- D Cienega Creek Natural Preserve

2. From the Quilter Trail, the AZT turns onto the ___ for the long climb past Grass Shack; the park designated it part of the Arizona National Scenic Trail in 2012.

- A Oracle Ridge Trail
- B Manning Camp Trail
- C Tanque Verde Ridge Trail
- D Italian Spring Trail

3. On the northern Rincon descent, the AZT joins the ___ to work its way down toward Redington Road. It's the start of the long drop off the back side of the range.

A Quilter Trail
B Wilderness of Rocks Trail
C Tanque Verde Ridge Trail
D Italian Spring Trail

4. Climbing the Rincons south to north, which junction does the AZT reach FIRST?

A The Mica Mountain junction
B The Manning Camp Trail junction
C The Quilter Trail junction
D The Italian Spring Trail junction

5. At which boundary does the AZT join the Quilter Trail to enter the Rincon Mountain District?

A Cienega Creek Preserve boundary
B Gordon Hirabayashi Campground
C Saguaro National Park boundary
D Redington Road crossing

6. After joining the Quilter Trail, which trail carries the AZT up past Grass Shack into the high Rincons?

A Hope Camp Trail
B Manning Camp Trail
C Tanque Verde Ridge Trail
D Italian Spring Trail

7. At which junction does the AZT leave the summit trail and contour around the Rincon high point?

A Mica Mountain junction
B Italian Spring Trail junction
C Quilter Trail junction
D Redington Road crossing

8. On the northern Rincon descent, which trail does the AZT join to work down toward Redington Road?

A Cow Head Saddle route
B Tanque Verde Ridge Trail
C Quilter Trail
D Italian Spring Trail

9. The AZT joins the West Fork of ___ Trail, following the drainage upstream toward Hutch's Pool and the base of the big Catalina climb.

A Ventana Canyon
B Sabino Canyon
C Bear Canyon
D Romero Canyon

10. In the West Fork of Sabino Canyon, a notoriously inconspicuous, unsigned side trail leaves the AZT to reach ___. Hikers regularly walk right past it, so watch carefully if you want to fill up or swim.

A Hutch's Pool
B Italian Spring
C Lemmon Creek
D Molino Basin

11. At ___, after completing the vertical-mile climb from the Sabino/Hutch's Pool area, the AZT turns toward the high pine forests. The pass is the pivot point from the brutal ascent into the cool upper Catalinas.

A Redington Pass
B Cow Head Saddle
C Romero Pass
D Marshall Saddle

12. In the high Catalinas, the AZT joins the ___, winding among the granite hoodoos and slabs near the top of the range. It's the scenic granite heart of the passage below Mount Lemmon.

A West Fork of Sabino Canyon Trail
B Italian Spring Trail
C Oracle Ridge Trail
D Wilderness of Rocks Trail

13. Which of these is NOT part of the Catalina crossing sequence?

A Cow Head Saddle
B Wilderness of Rocks Trail
C Romero Pass
D West Fork of Sabino Canyon Trail

14. Northbound, where in the Catalina junction sequence does the AZT join the West Fork of Sabino Canyon Trail?

A Just after Romero Pass
B After the Wilderness of Rocks
C Last, at Marshall Saddle
D First, before Hutch's Pool

15. What makes the side trail down to Hutch's Pool notorious among hikers?

A It is a busy, well-marked junction
B It is a notoriously inconspicuous, unsigned spur
C It requires a wilderness permit
D It was closed after the Aspen Fire

16. Where does the AZT turn toward the high pine forests after the vertical-mile climb from Sabino/Hutch's Pool?

A Redington Pass
B Mica Mountain junction
C Romero Pass
D Marshall Saddle

17. Which trail winds among granite hoodoos near the top of the Santa Catalinas below Mount Lemmon?

A Quilter Trail
B Wilderness of Rocks Trail
C Tanque Verde Ridge Trail
D Oracle Ridge Trail

18. Below Summerhaven, the AZT descends ___, then turns onto the Oracle Ridge Trail for the long, exposed descent toward Oracle. From here it's a committing ridgeline walk with little shade or water.

A Wilderness of Rocks
B Pusch Ridge
C Romero Pass
D Red Ridge

19. At the northern terminus of the passage, the AZT leaves the trail and joins ___ near the historic ranch — the handoff from singletrack to the road approach toward Oracle and the next passage.

A American Flag Ranch Road
B Camino Loma Alta
C Tanque Verde Road
D Redington Road

20. At which junction does the AZT leave the high Catalina forest and begin its transition toward the Oracle Ridge descent?

A Romero Pass
B Redington Pass
C Marshall Saddle
D Cow Head Saddle

21. Where does the AZT briefly follow village roads — a short, well-signed road walk and a chance to detour for food and water?

A Redington
B Summerhaven
C Manning Camp
D Oracle

22. Northbound from Marshall Saddle to the end of Passage 12, which of these does the AZT NOT pass?

A Summerhaven
B The Oracle Ridge Trail
C American Flag Ranch Road
D Romero Pass

23. Which named trail does the AZT join at the Saguaro National Park boundary to enter the Rincon Mountain District?

A Italian Spring Trail
B Tanque Verde Ridge Trail
C Quilter Trail
D Oracle Ridge Trail

24. Which named trail does the AZT follow up the drainage toward Hutch's Pool at the base of the big Catalina climb?

A West Fork of Sabino Canyon Trail
B Tanque Verde Ridge Trail
C Oracle Ridge Trail
D Wilderness of Rocks Trail

Go deeper

ONLINE This lesson on the web flashfeedlearningapp.com/study-guides/azt-rincon-catalina/navigation-and-junctions

STUDY AZT: Rincons & Catalinas in the FlashFeed app flashfeedlearningapp.com/packs/azt-rincon-catalina

LESSON 11 OF 19

Ecology & Life Zones

Sky islands & the six life zones

WHAT YOU'LL BE ABLE TO DO

- Define the sky-island concept and its consequence of stranding endemic species on the peaks.
- Identify the six stacked biotic life zones the trail climbs through, from Sonoran Desert scrub to mixed-conifer forest.
- Describe the Sonoran Desert scrub zone by its arborescent cacti, desert legumes, and drought-adapted shrubs.

The deepest reward of this stretch isn't a view or a summit — it's the chance to climb through an entire continent's worth of ecosystems in a single day. This lesson explains the sky-island concept and the stacked life zones the trail passes through.

Sky islands & the six life zones

The Rincons and Catalinas are **sky islands**: isolated mountain ranges surrounded by radically different lowland environments — here, forested peaks marooned in a sea of desert. Their isolation and their steep elevation gradient preserve stacked life zones and species found nowhere else, so each range functions as an ecological island where northern and Mexican species are stranded far from their main ranges.

Climbing the trail takes you through **six distinct biotic communities** stacked by elevation, and the ascent is roughly the ecological equivalent of driving from northern Mexico to Canada:

- **Sonoran Desert scrub** at the lowest elevations, defined by arborescent (tree-like) cacti like the saguaro, desert legumes such as mesquite and palo verde, and small-leaved (microphyllous) drought-adapted shrubs.
- **Desert grassland** above it, with perennial bunchgrasses interspersed with ocotillo and soapweed yucca — the golden, rolling country of the valley approaches and Redington Pass.
- **Madrean oak woodland**, the transition "encinal" belt dominated by evergreen oaks and pointleaf manzanita, a hallmark of the Madrean sky islands as the air grows cooler and wetter.
- **Pine-oak woodland**, where ponderosa pine and alligator juniper appear — the first ponderosas a welcome sign to a climbing hiker that the worst heat is below.
- **Pine forest** higher still, where dense stands of ponderosa pine close overhead as the oak component thins out and moisture increases beyond the pine-oak mix below.
- **Mixed-conifer forest** on the highest peaks, of Douglas fir and quaking aspen — glacial relicts from the cooler, wetter Pleistocene, cool islands of northern forest sitting improbably atop desert ranges.

The extreme elevational range and long isolation of these mountains let **plants that occur nowhere else in the United States** thrive in the higher zones. That's the magic of the sky island: by climbing a few thousand feet you don't just change the scenery, you change biomes entirely — and you walk among living relics of an older, colder Southwest stranded on the peaks. Understanding this gradient turns a hard climb into a guided tour through deep ecological time.

Key terms

Sky Island

An isolated mountain range surrounded by radically different lowland environments — here, forested peaks marooned in a sea of desert. The isolation and the elevation gradient preserve stacked life zones and species found nowhere else, making each range an ecological island.

Key concepts

Sonoran Desert scrub

- The lowest and hottest biotic community the trail crosses, at the very bottom of the elevation gradient.
- Tree-like (arborescent) cacti define it, alongside legumes such as mesquite and palo verde and small-leaved drought shrubs.
- Its signature giant is the towering saguaro; the belt is named for the arid North American region it belongs to.

Desert grassland

- The golden, rolling belt just above the lowest zone, defining the valley approaches and Redington Pass.
- Perennial bunch-forming plants dominate here, interspersed with ocotillo and soapweed yucca.
- This open, nearly treeless, prairie-like zone sits between the saguaro country below and the oak woodland above.

Madrean oak woodland

- A transition belt where the air grows cooler and wetter, a hallmark of these isolated southwestern ranges.
- Spanish speakers call this evergreen 'encinal' belt; pointleaf manzanita grows among its trees.
- It is dominated by evergreen hardwoods of the genus Quercus, marking the shift from grassland to pine country.

Pine-oak woodland

- A wooded transition belt above the encinal, where the first tall conifers appear.
- The first ponderosas here are a welcome sign to a climbing hiker that the worst heat lies below; alligator juniper grows alongside.
- Named for the mix of two tree types it shares: tall ponderosa conifers and evergreen Quercus hardwoods.

Mixed-conifer forest

- The highest biotic community, crowning only the tallest peaks of these ranges.
- Its Douglas fir and quaking aspen are glacial relicts, survivors stranded from the cooler, wetter Pleistocene.
- A cool island of northern woodland atop the desert ranges, blending several evergreen tree species with aspen.

Key facts



Image by Robert Simmon, based on data provided by the Landsat 7 science team. · Public domain

Six biotic communities

The route traverses six distinct biotic communities stacked by elevation: desert scrub, desert grassland, oak woodland, pine-oak woodland, pine forest, and mixed-conifer forest. Climbing from bottom to top is the rough ecological equivalent of driving from northern Mexico to Canada.



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Desert grassland

Above the scrub, desert grassland features perennial bunchgrasses interspersed with ocotillo and soapweed yucca. It's the golden, rolling country of the valley approaches and Redington Pass — open, exposed, and grass-dominated.



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Madrean oak woodland

The Madrean oak woodland is the transition zone, dominated by evergreen oaks and pointleaf manzanita. This 'encinal' belt — a hallmark of the Madrean sky islands — marks the shift from desert to mountain as the air grows cooler and wetter.

Pine-oak woodland

Higher still, pine-oak woodland introduces ponderosa pine and alligator juniper as the climate cools and moisture increases. The first ponderosas are a welcome sign for the climbing hiker that the worst of the heat is below.

Mixed-conifer forest

The highest peaks are capped by mixed-conifer forest of Douglas fir and quaking aspen — glacial relicts left over from the cooler, wetter Pleistocene. These cool islands of northern forest sit improbably atop ranges surrounded by desert.



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Plants found nowhere else

The extreme elevational range and long isolation of these sky islands let plants that occur nowhere else in the United States thrive in the higher zones. The mountains act as refuges, stranding northern and Mexican species far from their main ranges.

Self-test

Answer each question from memory, then check your work against the answer key.

1. What is a 'sky island' as the term applies to the Rincons and Catalinas?

- (A) A chain of desert peaks joined by continuous forest corridors
- (B) A high plateau with uniform vegetation from base to summit
- (C) A cluster of coastal volcanic islands ringed by ocean
- (D) An isolated mountain range whose forested peaks are surrounded by a sea of lowland desert

2. What consequence does a sky island's long isolation produce in its higher zones?

A. It connects the range to distant forests through vegetation corridors
B. It strands northern and Mexican species far from their main ranges as living refuges
C. It gradually eliminates every unique species from the range
D. It lets lowland desert species colonize and dominate the peaks

3. The higher zones of these sky islands harbor plants that occur nowhere else in what area?

A. The United States
B. The Sierra Madre
C. The Rocky Mountains
D. The Sonoran Desert

4. Which two features of a sky island let it preserve stacked life zones and unique species?

A. Its low rainfall and its flat terrain
B. Its connectivity to other ranges and its gentle slopes
C. Its isolation and its steep elevation gradient
D. Its high rainfall and its uniform temperatures

5. Which statement is NOT true of the sky islands?

A. They are forested peaks marooned in a sea of desert
B. They function as ecological islands for stranded species
C. They are lowland deserts surrounded by rings of forest
D. Their isolation preserves species found nowhere else

6. Climbing the trail from bottom to top passes through how many distinct biotic communities?

A. Three
B. Six
C. Ten
D. Four

7. Climbing from the base to the peaks is roughly the ecological equivalent of driving between which two places?

A. Texas and Florida
B. California and Oregon
C. Arizona and Utah
D. Northern Mexico and Canada

8. Which sequence correctly orders three of the zones from lowest to highest elevation?

A. Desert grassland, Madrean oak woodland, mixed-conifer forest
B. Madrean oak woodland, desert grassland, mixed-conifer forest
C. Desert grassland, mixed-conifer forest, Madrean oak woodland
D. Mixed-conifer forest, Madrean oak woodland, desert grassland

9. Which biotic community sits at the lowest elevations of the climb?

A. Sonoran Desert scrub
B. Mixed-conifer forest
C. Pine-oak woodland
D. Madrean oak woodland

10. Which of these is NOT one of the six life zones the trail climbs through?

A Pine-oak woodland
B Alpine tundra
C Desert grassland
D Madrean oak woodland

11. The lowest elevations are ___ scrub, defined by arborescent (tree-like) cacti such as the saguaro, desert legumes like mesquite and palo verde, and small-leaved (microphyllous) shrubs adapted to drought and heat.

A Chihuahuan Desert
B Great Basin Desert
C Mojave Desert
D Sonoran Desert

12. Which plant is the arborescent (tree-like) cactus that characterizes Sonoran Desert scrub?

A Alligator juniper
B Ocotillo
C Saguaro
D Soapweed yucca

13. Which pair are named as the desert legumes of the Sonoran Desert scrub?

A Evergreen oak and pointleaf manzanita
B Ponderosa pine and alligator juniper
C Mesquite and palo verde
D Douglas fir and quaking aspen

14. The 'microphyllous' shrubs of Sonoran Desert scrub are defined by which adaptation?

A Small leaves suited to drought and heat
B A total absence of any leaves
C Needle leaves that resist hard freezes
D Broad leaves that maximize shade

15. Which is NOT a defining feature of the Sonoran Desert scrub zone?

A Small-leaved shrubs adapted to drought
B Desert legumes like mesquite and palo verde
C Arborescent cacti such as the saguaro
D Quaking aspen and Douglas fir stands

Go deeper

ONLINE This lesson on the web flashfeedlearningapp.com/study-guides/azt-rincon-catalina/ecology-and-life-zones

STUDY AZT: Rincons & Catalinas in the FlashFeed app flashfeedlearningapp.com/packs/azt-rincon-catalina

LESSON 12 OF 19

Flora & Fauna

Plants & small creatures · Reptiles, birds & mammals

WHAT YOU'LL BE ABLE TO DO

- Describe the saguaro's size and lifespan and its keystone role as a desert wildlife high-rise.
- Identify signature plants of the desert-to-sky-island gradient — ocotillo and alligator juniper — by their distinctive traits.
- Recognize the desert's spectacular insects — the palo verde beetle and the tarantula hawk.
- Distinguish the reptiles by their adaptations — Yarrow's live-bearing lizard, the bipedal collared lizard, and the venomous fossorial Gila monster.
- Recognize the sky-island animals by name, including the reptiles, the coatimundi, and the Mexican spotted owl.

The sky-island gradient means this stretch hosts an extraordinary range of life — from giant cacti and outsized insects in the desert to live-bearing lizards and threatened owls in the high forest. This lesson covers the plants and animals you're most likely to meet.

Plants & small creatures

The icon of the lowest trail is the **saguaro**, which can live 150–200 years, grow up to roughly 40–60 feet tall, and weigh well over a ton when fully hydrated. Its arms typically don't appear until the plant is 50–100 years old, depending on rainfall and growing conditions, so a many-armed giant is genuinely ancient. Alongside it, **ocotillo** look like clusters of dry, thorny sticks most of the year, then leaf out and throw up brilliant red-orange flower spikes after spring rains — a vital nectar source for migrating hummingbirds. Climb into the oak and pine-oak zones and you'll meet the **alligator juniper**, unmistakable for its deeply checkered bark that looks exactly like alligator hide.

The desert's insects run to the spectacular. The **palo verde beetle** spends 3–4 years underground as a grub feeding on tree roots before emerging during the summer monsoon as a huge (3+ inch) flying beetle — alarming but harmless, and beneficial for aerating the soil. The **tarantula hawk** is a large wasp with one of the most painful stings of any insect; it parasitizes tarantulas, paralyzing a spider and dragging it to a burrow so its larva can consume it alive. Both are part of the broader **monsoon insect surge**, when warm, humid summer air triggers mass emergences of beetles and moths — a feast for birds, bats, and lizards that makes the high country hum in July and August.

Reptiles, birds & mammals

The reptiles span the elevation gradient. High in the pine-oak forests and talus slopes lives **Yarrow's spiny lizard**, a viviparous (live-bearing) species — an adaptation that lets it survive cool mountain nights where eggs might not incubate. On boulder-strewn mid-elevation slopes, the **collared lizard** hunts with

powerful jaws and can sprint *bipedally*, rearing onto its hind legs to run across the rocks. And the **Gila monster** — one of the few venomous lizards on Earth — spends up to 90% of its life underground, emerging mainly in late spring to raid eggs and nestlings; slow and non-aggressive, it's a rare, protected sight best admired from a distance.

The birds and mammals are just as memorable. Mature saguaros become **wildlife high-rises**: Gila woodpeckers and gilded flickers excavate nest cavities that, once abandoned, are reused by tiny elf owls — one reason the cactus is a keystone species. In the oak and pine forests, bands of **coatimundi** — social, long-tailed members of the raccoon family — forage through the leaf litter with their ringed tails held high, and a troop crossing the trail is a sky-island highlight. Highest of all, the threatened **Mexican spotted owl** roosts in the cool, steep-walled ravines of the conifer forests, its presence a sign of healthy old-growth canyon habitat — an occasional reward for quiet hikers in the high country.

Key concepts

Saguaro

- The towering icon of the lowest trail, a giant that can live 150 to 200 years.
- It can grow 40 to 60 feet tall and weigh well over a ton when fully hydrated; its arms don't appear until it's 50 to 100 years old, depending on conditions.
- A keystone 'wildlife high-rise': woodpeckers and gilded flickers carve nest holes later reused by tiny elf owls.

Ocotillo

- For most of the year it looks like a cluster of dry, thorny sticks.
- After spring rains it leafs out and throws up brilliant red-orange flower spikes.
- Those blooms are a vital nectar source for migrating hummingbirds in the low country.

Alligator juniper

- A tree you meet on climbing into the oak and pine-oak zones.
- It is unmistakable for its deeply checkered bark.
- That bark looks exactly like the hide of the large reptile it's named for.

Yarrow's spiny lizard

- A reptile of the high pine-oak forests and talus slopes.
- It is viviparous, meaning live-bearing rather than egg-laying.
- Giving birth to live young lets it survive cool mountain nights where eggs might not incubate.

Collared lizard

- A reptile that hunts on boulder-strewn mid-elevation slopes.
- It has powerful jaws for catching prey among the rocks.
- Startle it and it sprints bipedally, rearing onto its hind legs to run across the boulders.

Gila monster

- One of the few venomous lizards on Earth, and a rare, protected sight.
- It spends up to 90% of its life underground, emerging mainly in late spring.
- Slow and non-aggressive, it surfaces to raid eggs and nestlings and is best admired from a distance.

Key facts



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Ocotillo

Ocotillo look like clusters of dry, thorny sticks most of the year, then leaf out and produce brilliant red-orange flower spikes after spring rains — a vital nectar source for migrating hummingbirds. Their quick leaf-and-drop cycle tracks each pulse of moisture.



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Alligator juniper

Alligator juniper is unmistakable for its deeply checkered bark that looks like alligator hide. A long-lived tree of the oak and pine-oak zones, it's one of the easiest sky-island species to identify on sight along the mid-elevation trail.



Mike Ostrowski · CC BY-SA 4.0

Palo verde beetle

Palo verde beetles spend 3-4 years underground as grubs feeding on tree roots before emerging during the summer monsoon as huge (3+ inch) flying beetles. Despite their alarming size they're harmless to people — and beneficial for aerating the soil.

> **Monsoon insect surge**
>
> The insect fauna explodes during the summer monsoon, when warm, humid air masses trigger emergences of beetles, moths, and more. It's a feast for birds, bats, and lizards — and the reason the high country buzzes with life in July and August.



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Saguaro apartments

Gila woodpeckers and gilded flickers excavate nest cavities in mature saguaros; once abandoned, those holes are reused by tiny elf owls and other birds. A single old saguaro becomes a high-rise of desert wildlife — one reason the cactus is a keystone species.



Zion National Park · Public domain

Mexican spotted owl

Mexican spotted owls roost in the cool, steep-walled ravines of the higher conifer forests — a threatened species whose presence signals healthy old-growth canyon habitat. Quiet hikers in the high country are occasionally rewarded with a glimpse or a call.

By the numbers

Maximum height a saguaro cactus can reach (ft)

60 ft

Maximum age a saguaro cactus can reach (years)

200 years

Matched pairs

Each item on the left goes with the one on the right.

Ocotillo → Dry thorny sticks that flower red-orange after spring rains

Alligator juniper → Deeply checkered bark that looks like alligator hide

Palo verde beetle → Spends 3-4 years underground before a huge monsoon emergence

Yarrow's spiny lizard → Live-bearing reptile of the high pine-oak forests

Collared lizard → Sprints across boulder slopes on its hind legs

Gila monster → Venomous lizard that spends most of its life underground

Coatimundi → Social ring-tailed member of the raccoon family

Self-test

Answer each question from memory, then check your work against the answer key.

1. How long can a saguaro cactus live?

- A) About 200 years
- B) About 75 years
- C) About 500 years
- D) About 1000 years

2. How tall can a fully grown saguaro get?

- A) 10 to 15 feet
- B) 40 to 60 feet
- C) 100 to 120 feet
- D) 5 to 8 feet

3. Which statement about the saguaro is NOT true?

- A) It can weigh over a ton when fully hydrated
- B) It can grow 40 to 60 feet tall
- C) Its arms appear in its first year of growth
- D) It can live 150 to 200 years

4. Which birds excavate the nest cavities that make a mature saguaro a wildlife high-rise?

- A) Purple martins
- B) Mexican spotted owls
- C) Elf owls
- D) Gila woodpeckers and gilded flickers

5. Which small bird reuses abandoned nest cavities in old saguaros?

- A) Elf owls
- B) Gila woodpeckers
- C) Mexican spotted owls
- D) Gilded flickers

6. What does ocotillo look like for most of the year?

- A) Deeply checkered bark
- B) Clusters of dry, thorny sticks
- C) A single tall barrel trunk
- D) Broad evergreen leaves year-round

7. Alligator juniper is most easily recognized by its...?

- A) Smooth peeling white bark
- B) Giant multi-armed silhouette
- C) Red-orange flower spikes
- D) Deeply checkered bark like alligator hide

8. Ocotillo's flower spikes are a vital nectar source for which migrating animals?

- A) Coatimundi
- B) Elf owls
- C) Hummingbirds
- D) Bats

9. Which statement about ocotillo is NOT true?

- A) It keeps broad green leaves all year
- B) Its flowers feed migrating hummingbirds
- C) It produces red-orange flower spikes after spring rains
- D) It looks like dry thorny sticks most of the year

10. You spot a mid-elevation tree whose bark is broken into deep square plates like reptile skin. What is it?

A Ocotillo
B Alligator juniper
C Palo verde
D Saguaro

11. Despite its name, the tarantula hawk is actually what kind of creature?

A A bird of prey
B A spider
C A large wasp
D A beetle

12. How long does a palo verde beetle spend underground as a grub before emerging?

A A few weeks
B 6 to 8 months
C About 20 years
D 3 to 4 years

13. Despite its alarming size, the palo verde beetle is...?

A Deadly venomous
B Aggressive and stinging
C A crop-destroying pest
D Harmless to people

14. The tarantula hawk is notable among insects for having...?

A A mild sting like a mosquito
B One of the most painful stings of any insect
C No sting at all
D A venom that is fatal to humans

15. How does the tarantula hawk use a tarantula?

A Shares its burrow peacefully
B Eats it whole immediately
C Paralyzes it so its larva can eat it alive
D Uses its silk to build a nest

16. Yarrow's spiny lizard is unusual among reptiles because it...?

A Gives birth to live young
B Is venomous
C Lays eggs in deep sand
D Sprints on its hind legs

17. The collared lizard is known for its ability to...?

A Swim across streams
B Burrow underground for years
C Glide between trees
D Sprint on its hind legs across boulders

18. Roughly what share of its life does the Gila monster spend underground?

A About 10 percent
B About 50 percent
C About 90 percent
D About 25 percent

19. Live-bearing helps Yarrow's spiny lizard survive its habitat's...?

A Cool mountain nights that could stop eggs incubating
B Frequent flooding of burrows
C Lack of insect prey
D Extreme desert heat at low elevation

20. Which reptile-and-adaptation pairing is INCORRECT?

A. Yarrow's spiny lizard — gives birth to live young
B. Gila monster — sprints bipedally on its hind legs
C. Collared lizard — runs on its hind legs across rocks
D. Gila monster — venomous and mostly underground

21. Which threatened high-country bird roosts in cool, steep-walled conifer ravines, its presence a sign of healthy old-growth canyon habitat?

A. Gilded flicker
B. Elf owl
C. Gila woodpecker
D. Mexican spotted owl

22. A troop of social, ring-tailed mammals foraging through oak-forest leaf litter with tails held high would be…?

A. Black bears
B. Coatimundi
C. Desert bighorn sheep
D. Mountain lions

23. The coatimundi belongs to which animal family?

A. Bear
B. Dog
C. Raccoon
D. Cat

24. Which sky-island animal is one of the few venomous lizards on Earth?

A. Gila monster
B. Collared lizard
C. Coatimundi
D. Yarrow's spiny lizard

25. Which sky-island reptile is described as live-bearing (viviparous)?

A. Gila monster
B. Sonoran spotted whiptail
C. Collared lizard
D. Yarrow's spiny lizard

Go deeper

ONLINE This lesson on the web flashfeedlearningapp.com/study-guides/azt-rincon-catalina/flora-and-fauna

STUDY AZT: Rincons & Catalinas in the FlashFeed app flashfeedlearningapp.com/packs/azt-rincon-catalina

LESSON 13 OF 19

Hazards & Safety

Weather & terrain · Wildlife & fire

WHAT YOU'LL BE ABLE TO DO

- Recall the section's headline hazard facts — heat as the deadliest low-desert danger, the 2003 Aspen Fire legacy, and the harmless palo verde beetle.
- Match the segment's dangerous animals to the correct safe response or key trait.
- Recognize the segment's hazardous animals by name — black bears, mountain lions, Africanized bees, and rattlesnakes.

A desert-to-pine traverse stacks up an unusual range of dangers — heat at the bottom, snow at the top, monsoon violence in between, and a full cast of wildlife. This lesson covers the hazards that actually hurt people on this stretch and how to handle them.

Weather & terrain

Heat is the deadliest hazard on the low passages: temperatures routinely exceed 100°F, with little shade or water on the desert stretches and Redington Pass. Hike the low country in the cool hours, carry ample water, and simply avoid the desert sections in summer. At the other extreme, **snow and ice** can persist above about 6,000 feet into spring, making the high traverses near Mica Mountain and Mount Lemmon slow, hazardous, and hard to navigate — carry traction and check conditions before committing to the high country in winter and early spring.

The transition season brings its own violence. The **July–August monsoon** delivers fierce afternoon thunderstorms with heavy rain, deadly lightning, and rapid flash flooding; get off ridgelines and out of drainages before midday storms build. Two terrain-and-ecology hazards round out the list. **Invasive buffelgrass** forms continuous fuel where native desert plants leave bare ground, feeding hot, fast-moving wildfires the saguaro desert isn't adapted to survive — a reason fire danger can spike near the low trail. And the southern passages see heavy summer **overgrowth**, especially cat-claw acacia, whose curved thorns grab and tear skin and gear (long sleeves and pants earn their keep). The legacy of fire is visible too: the **2003 Aspen Fire** burned much of Mount Lemmon, including parts of Summerhaven, and its scars still mean lost shade, downed timber, and altered navigation in places.

Wildlife & fire

The animal hazards are mostly manageable with awareness. **Black bears and mountain lions** inhabit the mid-to-high elevations of both ranges — store all food and scented items properly (use the bear boxes at camps), keep a clean camp, and never run from a lion; make yourself big and back away slowly. **Africanized bees** are established region-wide and defend their hives aggressively; give any hive a wide berth, and if attacked, run in a straight line to shelter without flailing (don't jump in water — they'll wait). And **rattlesnakes**, including the highly venomous Mohave and the tiger rattlesnake, are common at lower

and middle elevations: watch hand and foot placement on rocky trails, step *on* logs rather than blindly over them, and give any snake room to retreat.

A reassuring myth-buster: despite its intimidating 3+ inch size and clumsy monsoon flight, **the giant palo verde beetle is harmless to people** — it doesn't sting, though its grubs do feed on tree roots underground. More serious is **canyon flash flooding**: narrow canyons like Sabino can flood with terrifying speed during monsoon storms — a wall of brown water from rain miles upstream, sometimes under a blue sky overhead — so never camp in or cross a wash when storms are building anywhere in the watershed above you. Finally, **wildfire closures** are a recurring reality: active fires or post-fire damage periodically close sections of the Coronado National Forest and the AZT, so check current Forest Service and AZT Association notices before your hike — burned reroutes and access changes are common on these ranges.

Key concepts

Black bears

- A large omnivorous mammal inhabiting the mid-to-high elevations of both ranges.
- Store all food and scented items in the metal camp lockers and keep a clean camp to coexist with it.
- The sturdy food-storage lockers provided at these camps exist chiefly to keep this animal out.

Mountain lions

- A large predatory cat of the mid-to-high elevations of both ranges.
- Never run from it; instead make yourself big and back away slowly.
- This big cat is the reason the standing advice is to stand tall and retreat rather than flee.

Africanized bees

- A stinging insect hazard established region-wide across these mountains.
- They defend their hives aggressively, so give any hive a wide berth.
- If attacked, run in a straight line to shelter without flailing, and don't jump in water, since they'll wait.

Rattlesnakes

- Venomous reptiles common at lower and middle elevations on rocky trails.
- The highly venomous Mohave and the tiger species are the local kinds to watch for.
- Step ON logs rather than blindly over them, and give any of these coiled reptiles room to retreat.

Key facts

> **Extreme heat at low elevation**
> Heat is the deadliest hazard on the low passages: temperatures routinely exceed 100°F, and there's little shade or water on the desert stretches and Redington Pass. Hike the low country in the cool hours, carry ample water, and avoid the desert sections in summer entirely.

Snow and ice up high

Above about 6,000 feet, snow and ice can persist into spring, making the high traverses near Mica Mountain and Mount Lemmon slow and hazardous — and obscuring the trail. Carry traction and check conditions before committing to the high country in winter and early spring.

Buffelgrass and wildfire

Invasive buffelgrass forms continuous fuel where native desert plants leave bare ground, feeding hot, fast-moving wildfires that the saguaro-and-cactus desert is not adapted to survive. It's transforming fire behavior in the Sonoran Desert — and a reason fire danger can spike near the low trail.



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The 2003 Aspen Fire

The 2003 Aspen Fire burned much of Mount Lemmon, including parts of Summerhaven, and its scars still shape the trail: burned areas mean lost shade, downed timber, and altered navigation in places. It's a vivid lesson in how fire reshapes a sky island.



Wikimedia Commons · Scott Bauer, USDA Agricultural Research Service · Public domain

Africanized bees

Africanized ('killer') bees are established across the region and defend their hives aggressively. Give any hive or swarm a wide berth, and if attacked, run in a straight line to shelter (a building or vehicle) without flailing — don't jump in water, as they'll wait.



Joshua Tree National Park · Public domain

Canyon flash flooding

Narrow canyons like Sabino can flash flood with terrifying speed during monsoon storms — a wall of brown water from rain miles upstream, under a blue sky overhead. Never camp in or cross a wash when storms are building anywhere in the watershed above you.

> **Fire and trail closures**
>
> Wildfire is a recurring reality on these ranges, and active fires or post-fire damage periodically close sections of the Coronado National Forest and the AZT. Check current Forest Service and AZT Association closure notices before your hike — burned reroutes and access changes are common.

Matched pairs

Each item on the left goes with the one on the right.

If Africanized bees attack → Run in a straight line to enclosed shelter

Venomous rattlesnakes of this segment → Include the Mohave and the tiger rattlesnake

Black bears and mountain lions → Inhabit the mid-to-high elevations of both ranges

Self-test

Answer each question from memory, then check your work against the answer key.

1. Which is the deadliest hazard on the low desert passages?

(A) Monsoon lightning
(B) Flash flooding
(C) Rattlesnake bites
(D) Extreme heat

2. What does the section say about the giant palo verde beetle, despite its intimidating 3+ inch size?

(A) It delivers a painful venomous sting
(B) It is harmless — it doesn't sting, though its grubs feed underground on tree roots
(C) It sprays an irritating defensive acid
(D) It bites and can spread disease

3. In what year did the Aspen Fire burn much of Mount Lemmon, including parts of Summerhaven?

(A) 1996
(B) 2011
(C) 2003
(D) 2020

4. The 2003 Aspen Fire burned much of which peak, including parts of the community of Summerhaven?

A Mount Lemmon
B Mount Wrightson
C Mica Mountain
D Rincon Peak

5. Above roughly what elevation can snow and ice persist into spring on the high traverses?

A 6,000 feet
B 12,000 feet
C 3,000 feet
D 9,000 feet

6. If Africanized bees attack, what should you do?

A Stand still and calmly swat them away
B Jump into the nearest water and wait them out
C Curl up on the ground and cover your head
D Run in a straight line to an enclosed shelter

7. What is the recommended response if you encounter a mountain lion?

A Turn and run downhill as fast as you can
B Make yourself big and back away slowly
C Climb the nearest tree to get above it
D Crouch low and make yourself as small as possible

8. How should you store food and scented items to avoid black bears in camp?

A Bury it a short distance from your tent
B Hang it from your tent's rain fly
C Use the bear boxes provided at camps
D Keep it inside your sleeping bag overnight

9. To reduce rattlesnake risk on rocky trails, how should you deal with logs across the path?

A Step blindly over the log to keep momentum
B Straddle the log and pause on top
C Step on top of the log rather than blindly over it
D Kick the log aside before crossing

10. Which two highly venomous rattlesnakes does this segment specifically name?

A Diamondback and sidewinder
B Copperhead and cottonmouth
C Coral snake and kingsnake
D Mohave and tiger rattlesnake

11. Which aggressive insect is established across the region and fiercely defends its colony against anyone who ventures too close?

A Africanized bees
B Yellowjackets
C Paper wasps
D Fire ants

12. Which large predators inhabit the mid-to-high elevations of both ranges?

A Grizzly bears and wolverines
B Black bears and mountain lions
C Bobcats and badgers
D Gray wolves and coyotes

13. Which reptiles does this segment's guide name as common at the lower and middle elevations?

A Coral snakes
B Copperhead
C Rattlesnakes
D Gila monsters

14. Which of these creatures is NOT one of the trail's dangerous animals — it is harmless?

A Giant palo verde beetle
B Black bears
C Africanized bees
D Rattlesnakes

15. Which animal should you never run from — instead making yourself big and backing away slowly?

A Coyote
B Mountain lion
C Bobcat
D Gray fox

16. Which animal should you never run from, instead making yourself big and backing away slowly?

A Africanized bee
B Black bear
C Rattlesnake
D Mountain lion

17. Storing food and scented items securely, and using dedicated camp storage boxes, mainly guards against which animal?

A Africanized bees
B Giant palo verde beetles
C Black bears
D Rattlesnakes

18. Which hazardous insect is established region-wide and defends its hive aggressively?

A Giant palo verde beetles
B Paper wasps
C Tarantula hawks
D Africanized bees

19. Which reptiles, including the Mohave and tiger varieties, are common at lower and middle elevations?

A Copperhead
B Rattlesnakes
C Gila monsters
D Coral snakes

Go deeper

ONLINE This lesson on the web flashfeedlearningapp.com/study-guides/azt-rincon-catalina/hazards-and-safety

STUDY AZT: Rincons & Catalinas in the FlashFeed app flashfeedlearningapp.com/packs/azt-rincon-catalina

LESSON 14 OF 19

Water Sources Up Close

Rincon water sources · Catalina and Redington water

WHAT YOU'LL BE ABLE TO DO

- Identify the Rincon water sources south to north — Rincon Creek, Chimenea Creek, Grass Shack, and Italian Spring — with their elevations.
- Recognize Manning Camp as the most dependable Rincon source and quantify the short Manning-to-Italian-Spring carry.
- Describe the drier Redington and Catalina sources: Caliente Creek, Molino Basin, Lemmon Creek, and High Jinks Ranch.

On a desert sky-island traverse, water is the variable that governs every other decision — where you camp, how far you push, how heavy your pack rides. This lesson walks the named sources one by one, south to north, so you can build a carry plan that matches the ground rather than hoping for the best. Always cross-check the live **AZT Water Report** before a trip; the notes here describe typical behavior, not guarantees.

Rincon water sources

The southern half of this stretch climbs from the desert into the high Rincons, and its water follows the elevation. Low down in Passage 8, **Cienega Creek** is the anchor — a genuinely perennial stream in the Cienega Creek Natural Preserve, shaded by cottonwoods and home to native fish. You need no permit to drink from it while staying on the AZT, though wandering off-trail into the wider preserve does require one. Nearer the park boundary, **Rincon Creek** offers seasonal flow in wet periods; treat it as the last reliable fill before the long climb, and never bank on it in a dry spring.

Once you enter Saguaro National Park and start up Passage 9, the sources rise with you. **Chimenea Creek** is the first seasonal water, draining the largest watershed in the Rincons. A few miles up sits **Grass Shack** (about 5,300 ft), both a designated campsite and the key mid-climb water, tucked among oaks along Chimenea Creek — reliable most years, but occasionally closed for contamination, so confirm with the Rincon Mountain Visitor Center first. Near the top, the prize is **Manning Camp** (about 7,920 ft), whose spring is generally available — the single most dependable source on the stretch. Dropping off Mica Mountain's north side late in the passage, **Italian Spring** (around 6,708 ft) is a worthwhile stop, most dependable after snowmelt or monsoon. The carry from Manning down to Italian Spring runs only three to four miles, a gentle descent of roughly 1,200 feet — useful to know when you're rationing.

Catalina and Redington water

North of the Rincons the picture turns drier and more exposed, and this is where careful planning matters most. **Passage 10 (Redington Pass)** has long been the problem child — little shade, no reliable piped source. **Caliente Creek**, crossed early under big cottonwoods, runs only seasonally, and the ATA

flatly flags the section as "not reliable." One more trap to remember: **Molino Basin Campground water is shut off when the campground closes each spring**, usually by the end of April, and Gordon Hirabayashi Campground a little farther on has no water at all.

Climbing into the Catalinas on **Passage 11**, water bookends the big ascent. Low down, the **West Fork of Sabino Canyon** — including the deep, perennial-to-seasonal **Hutch's Pool** — is the dependable source; high up near Marshall Saddle, seasonal **Lemmon Creek** flows. Between them lies **Romero Pass** (about 6,000 ft), which has no named spring on the main route, so most hikers carry up from Hutch's Pool. (The Pusch Ridge Bypass, 11e, is the watered alternative, passing Novio, Crystal, and Green Springs.) Finally, **Passage 12 down Oracle Ridge** is the driest of all — the ATA lists only Summerhaven at the top and High Jinks Ranch mid-passage. Leave Summerhaven with a full load; the long, shadeless ridge to Oracle gives back nothing.

Key concepts

Rincon Creek

- A watercourse near the national park boundary offering seasonal flow only in wet periods.
- Treat it as the last reliable fill before the long climb, and never bank on it in a dry spring.

Chimenea Creek

- The first seasonal water once you enter Saguaro National Park and start up Passage 9.
- This stream drains the largest watershed in the entire Rincons.

Italian Spring

- Dropping off Mica Mountain's north side late in Passage 9, this source lies around 6,708 feet.
- It's most dependable after winter snowmelt or the summer monsoon, so confirm it's running before counting on it.
- The carry down to it from the high camp runs only three to four miles and about 1,200 feet of descent.

Caliente Creek

- Crossed early under big cottonwoods in the Redington Pass passage.
- It runs only seasonally, and the ATA flatly flags this whole section as 'not reliable.'

Lemmon Creek

- High up near Marshall Saddle, this seasonal water flows on Passage 11.
- It flows only seasonally near Marshall Saddle, so check the AZT Water Report before relying on it.

High Jinks Ranch

- The only mid-passage water the ATA lists on the trail's driest, most exposed northern descent.
- On the long, shadeless plunge down toward Oracle, it sits between the town at the top and the finish.

Key facts

Cienega Creek — perennial water on Passage 8

Cienega Creek, in the Cienega Creek Natural Preserve, is a perennial stream and the most reliable water in Passage 8. It supports native fish, cottonwoods, and mesquite. No permit is needed if you stay on the AZT through the preserve — but stepping off-trail into the wider preserve does require one.

Rincon Creek — seasonal, end of Passage 8

Rincon Creek, near Passage 8's northern end at the Saguaro National Park boundary, carries seasonal flow in wet periods. It is effectively the last water before the long Passage 9 climb into the Rincons, so treat it and tank up — and never count on it in a dry spring.

Chimenea Creek — first water in Passage 9

Chimenea Creek is the first seasonal water northbound in Passage 9 after entering Saguaro National Park, draining the largest watershed in the Rincons. Flow is seasonal and not guaranteed in dry years, so always check the AZT Water Report before relying on it.

Grass Shack — mid-climb water and camp

Grass Shack (about 5,300 ft) is the primary mid-Passage 9 water source and a designated Saguaro NP campsite, set among oaks along Chimenea Creek. Reliability varies — pools usually persist, but the source has occasionally been closed for contamination, so verify with the Rincon Mountain Visitor Center first.

Italian Spring — Mica's north slope

Italian Spring lies on the north descent of Mica Mountain, late in Passage 9 northbound, and is a worthwhile stop on this stretch. Flow is seasonal — most dependable after winter snowmelt or the summer monsoon — so confirm it is running before planning a long carry around it.

Caliente Creek — seasonal, Passage 10

Caliente Creek is crossed early in Passage 10 and runs only seasonally, shaded by big cottonwoods. The ATA flags water as 'not reliable' through Passage 10, so do not count on Caliente in late spring or summer — carry enough to bridge the whole Redington Pass crossing.

Passage 11 water — Sabino and Lemmon Creek

Passage 11's water bookends the big climb: the West Fork of Sabino Canyon (including the dependable Hutch's Pool) low down, and seasonal Lemmon Creek near Marshall Saddle up high. Lemmon Creek runs only seasonally, so check the AZT Water Report before counting on it — and plan to carry over Romero Pass, which has no spring on the main route.

> **Romero Pass has no spring on the main route**
> The AZT crests Romero Pass (about 6,000 ft) in Passage 11, but there is no named water at the pass itself on the main route — most hikers carry up from Hutch's Pool below. The Pusch Ridge Wilderness Bypass (11e), by contrast, passes Novio, Crystal, and Green Springs.



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Passage 12 — water only at the ends

Oracle Ridge (Passage 12) has almost no natural water and little shade along its long, exposed descent. The ATA lists only Summerhaven at the start and High Jinks Ranch mid-passage as sources, so leave Summerhaven with a full load to cover the dry, hot ridge down to Oracle.

By the numbers

Elevation of Grass Shack campground (ft)
5300 ft

Approximate elevation at the Italian Spring trail junction (ft)
6708 ft

Matched pairs

Each item on the left goes with the one on the right.

Manning Camp to Italian Spring (Passage 9)
→ About 3–4 miles, descending from ~7,920 ft to ~6,708 ft

Self-test

Answer each question from memory, then check your work against the answer key.

1. Which source is the first seasonal water northbound in Passage 9, draining the largest watershed in the Rincons?

A Rincon Creek
B Chimenea Creek
C Grass Shack
D Cienega Creek

2. Near the Saguaro NP boundary, which seasonal source is the effective last fill before the long Passage 9 climb?

A Rincon Creek
B Italian Spring
C Grass Shack
D Chimenea Creek

3. What is the approximate elevation of Grass Shack, the mid-Passage 9 campsite and water source?

A About 6,708 ft
B About 7,920 ft
C About 5,300 ft
D About 4,200 ft

4. Italian Spring, on Mica Mountain's north descent, sits at roughly what elevation?

A About 7,920 ft
B About 5,300 ft
C About 3,500 ft
D About 6,708 ft

5. Which of these is NOT a Rincon (Passage 8-9) water source?

A Lemmon Creek
B Grass Shack
C Chimenea Creek
D Italian Spring

6. Which Rincon source is generally the most dependable water on the stretch?

A Italian Spring
B Cienega Creek
C Manning Camp
D Grass Shack

7. Near the top of the Rincon climb, at what approximate elevation is Manning Camp?

A About 5,300 ft
B About 7,920 ft
C About 6,000 ft
D About 6,708 ft

8. How long is the carry from Manning Camp down to Italian Spring in Passage 9?

A About 10 to 12 miles
B Less than a mile
C About 7 miles
D About 3 to 4 miles

9. Roughly how much elevation does the trail lose from Manning Camp to Italian Spring?

A About 1,200 feet
B About 400 feet
C About 2,500 feet
D About 3,800 feet

10. Descending north from Manning Camp, which named water source comes next, about 3 to 4 miles down?

A Chimenea Creek
B Italian Spring
C Grass Shack
D Caliente Creek

11. Which Passage 10 creek runs only seasonally under big cottonwoods and is flagged by the ATA as 'not reliable'?

A Lemmon Creek
B Chimenea Creek
C Caliente Creek
D West Fork of Sabino Canyon

12. On Passage 11, which seasonal source flows high up near Marshall Saddle?

A High Jinks Ranch
B Hutch's Pool
C Caliente Creek
D Lemmon Creek

13. On the dry Oracle Ridge (Passage 12), the ATA lists only Summerhaven and which mid-passage source?

A Romero Pass
B Hutch's Pool
C Molino Basin
D High Jinks Ranch

14. Which of these is NOT a Catalina or Redington (Passage 10-12) water source?

A Caliente Creek
B High Jinks Ranch
C Grass Shack
D Lemmon Creek

15. What happens to the water at Molino Basin Campground each spring?

A Shut off when the camp closes
B Piped on to Gordon Hirabayashi
C Flows only after the monsoon
D Turned on for spring hikers

Go deeper

ONLINE This lesson on the web flashfeedlearningapp.com/study-guides/azt-rincon-catalina/water-sources-up-close

STUDY AZT: Rincons & Catalinas in the FlashFeed app flashfeedlearningapp.com/packs/azt-rincon-catalina

LESSON 15 OF 19

Landmarks of the Sky Islands

Catalina landmarks · Canyons, basins and ridges

WHAT YOU'LL BE ABLE TO DO

- Describe the Wilderness of Rocks and Passage 11's elevation extremes (high ~8,200 ft, Sabino low ~3,640 ft).
- Identify Romero Pass (~6,000 ft) and Marshall Gulch (~8,000 ft) as the Catalina saddle and the Passage 11/12 boundary.
- Recognize the Catalina (Hitchcock) Highway crossing at the start of Passage 11.
- Describe the West Fork of Sabino Canyon and Molino Basin (~4,500 ft) as key lower landmarks of the crossing.
- Identify Red Ridge (start of Passage 12) and Gordon Hirabayashi Campground (~4,700 ft, Passage 10/11 boundary), and Passage 10's ~2,300 ft of climbing.

A long trail becomes legible when you can name what you're walking through. This lesson covers the signature places along Passages 10 through 12 — the saddles, canyons, basins, and ridges that organize the route and give each day its shape. Knowing them turns a blur of switchbacks into a map you carry in your head.

Catalina landmarks

The heart of the Santa Catalina crossing is a sequence of high, dramatic places. The **Wilderness of Rocks** is the showpiece: a sub-alpine garden of sculpted granite in the Pusch Ridge Wilderness, traversed in Passage 11 between Romero Pass and Marshall Gulch. Its weathered formations and long views are unforgettable — but the trail can fade among the boulders, so this is a place to navigate deliberately rather than cruise. The passage's on-trail high point sits near here, around **8,200 feet**, in the cool conifer zone below Mount Lemmon.

Two junctions frame that high country. **Romero Pass** (about 6,000 ft) is the saddle where the AZT climbs out of the Sabino Canyon corridor toward the Wilderness of Rocks; it sits on the eastern edge of the Bighorn Sheep Management Area and ties together several major trails. At the upper end, **Marshall Gulch** (about 8,000 ft), at the top of Summerhaven's road, marks the boundary between Passage 11 and Passage 12 — the high-point gateway between the Catalina crossing and the long Oracle Ridge descent, with Lemmon Creek flowing near the saddle. Lower down, where Passage 11 begins, the AZT must cross the **Catalina (Hitchcock) Highway** on foot, just south of Gordon Hirabayashi Campground. That paved National Scenic Byway climbs over 6,000 feet from Tucson to Mount Lemmon, and the brief, busy road crossing is a jarring reminder of how close the wild high country sits to the city.

Canyons, basins and ridges

The lower and connecting terrain has its own landmarks, and they tend to define the route's hardest, hottest stretches. The **West Fork of Sabino Canyon** is the deep, granite-walled corridor the AZT threads through the lower Catalinas in Passage 11 — home to Hutch's Pool and the waters of Sabino Creek, and the low point of the passage at roughly 3,640 feet before the long climb to Romero Pass. To the east, **Molino Basin** (about 4,500 ft) is a high-desert grassland bowl on the lower south slope of the Catalinas, crossed by the Catalina Highway; the AZT drops into it at the end of Passage 10's descent, where a seasonal campground and Molino Creek sit. The Passage 10/11 boundary itself is **Gordon Hirabayashi Campground** at about 4,700 feet — open year-round but waterless. Passage 10 is also where the trail does roughly 2,300 feet of cumulative climbing across its hot, open miles.

Finally, the descent home. **Red Ridge** is the opening ridgeline drop from Summerhaven at the start of Passage 12, before the trail pivots onto Oracle Ridge for the long northern plunge toward Oracle. "Red Ridge" is in fact the official alternate name the ATA and Forest Service use for Passage 12, and the terrain lives up to its reputation: loose, rocky, and exposed, trading cool pine forest for baking high grassland with very little shade. Reading these features in advance — which are wet, which are exposed, which mark a boundary — is how you turn the route's raw mileage into a plan you can actually walk.

Key terms

Wilderness of Rocks

A sub-alpine granite wonderland in the Pusch Ridge Wilderness of the Santa Catalinas, traversed by the AZT in Passage 11 between Romero Pass and Marshall Gulch. Sculpted granite formations, long views, and Lemmon Creek define it — and because the trail can fade among the rocks, careful navigation matters.

Romero Pass

A high saddle (about 6,000 ft) on the Romero Trail in the Santa Catalinas, where the AZT climbs from the Sabino Canyon corridor toward the Wilderness of Rocks. It sits on the eastern edge of the Bighorn Sheep Management Area and is a key trail junction.

Marshall Gulch

A canyon and trailhead at the upper end of Summerhaven's road (about 8,000 ft) in the Santa Catalinas, where Lemmon Creek flows near the saddle. It marks the boundary between Passage 11 and Passage 12 — the high-point gateway between the Catalina crossing and the Oracle Ridge descent.

Catalina Highway crossing

The paved, heavily traveled Catalina (Hitchcock) Highway crosses the AZT at the start of Passage 11, just south of Gordon Hirabayashi Campground. A National Scenic Byway, it climbs over 6,000 ft from Tucson to Mount Lemmon — and hikers must cross it on foot.

West Fork of Sabino Canyon

The deep, granite-walled corridor the AZT follows through the lower Catalinas in Passage 11, home to Hutch's Pool and the waters of Sabino Creek. It forms the low point of the passage before the long climb to Romero Pass.

Molino Basin

A high-desert grassland basin on the lower south slope of the Santa Catalinas (about 4,500 ft), crossed by the Catalina Highway. The AZT drops into it at the end of Passage 10's descent; it holds a seasonal campground (closed in summer) and Molino Creek.

Red Ridge

The opening ridgeline descent from Summerhaven at the start of Passage 12, before the trail pivots onto Oracle Ridge for the long northern drop. 'Red Ridge' is the official alternate name for Passage 12 used by the ATA and Forest Service; the terrain is loose, rocky, and exposed.

Key concepts

Wilderness of Rocks

- The showpiece of the Santa Catalina crossing: a sub-alpine garden of sculpted granite.
- Set within the Pusch Ridge backcountry, it is traversed in Passage 11 between Romero Pass and Marshall Gulch.
- Its weathered granite formations are unforgettable, but the trail fades among the boulders, so navigate deliberately.

Marshall Gulch

- A high point at about 8,000 feet, at the top of Summerhaven's road.
- It marks the boundary between Passage 11 and Passage 12, with Lemmon Creek flowing near the saddle.
- This is the high-point gateway between the Catalina crossing and the long Oracle Ridge descent.

Catalina Highway

- A brief, jarring strip of pavement the AZT must cross on foot at the start of Passage 11.
- This paved National Scenic Byway climbs over 6,000 feet from Tucson to Mount Lemmon.
- The trail crosses it just south of Gordon Hirabayashi Campground, a reminder of how close the city sits to the wild.

West Fork of Sabino Canyon

- A deep, granite-walled corridor the trail threads through the lower Catalinas in Passage 11.
- At roughly 3,640 feet it is the low point of the passage, holding the dependable Hutch's Pool.
- From this shaded gorge the AZT begins its long climb up to Romero Pass.

Molino Basin

- A high-desert grassland bowl at about 4,500 feet on the lower south slope of the Catalinas.
- Crossed by the Catalina Highway, the AZT drops into it at the end of Passage 10's descent.
- A seasonal campground and a small creek sit here, though the campground water is shut off when it closes each spring.

Gordon Hirabayashi Campground

- The Passage 10/11 boundary, sitting at about 4,700 feet.
- Open year-round but completely waterless, it lies just north of where the AZT crosses the paved Catalina byway.

Red Ridge

- The opening descent from Summerhaven at the very start of Passage 12's long plunge toward Oracle.
- It is in fact the official alternate name the ATA and Forest Service use for all of Passage 12.
- The terrain is loose, rocky, and exposed, trading cool pine forest for baking high grassland with little shade.

By the numbers

Elevation of Romero Pass (ft)
6000 ft

Passage 11 on-trail high point near the Wilderness of Rocks (ft)
8200 ft

Elevation of Molino Basin (ft)
4500 ft

Elevation of Gordon Hirabayashi Campground, the Passage 10/11 boundary (ft)
4700 ft

Approximate cumulative elevation gain on Passage 10 (ft)
2309 ft

Self-test

Answer each question from memory, then check your work against the answer key.

1. In Passage 11, the AZT traverses the Wilderness of Rocks between which two landmarks?

(A) Romero Pass and Marshall Gulch
(B) Molino Basin and Gordon Hirabayashi
(C) Sabino Canyon and Oracle
(D) Hutch's Pool and Summerhaven

2. The West Fork of Sabino Canyon forms the low point of Passage 11 at roughly what elevation?

A) 6,000 ft
B) 4,500 ft
C) 4,700 ft
D) 3,640 ft

3. Passage 11's on-trail high point, near the Wilderness of Rocks, sits at roughly what elevation?

A) About 6,000 ft
B) About 8,200 ft
C) About 4,700 ft
D) About 3,640 ft

4. The Wilderness of Rocks lies within which wilderness of the Santa Catalinas?

A) Rincon Mountain Wilderness
B) Bighorn Sheep Management Area
C) Pusch Ridge Wilderness
D) Santa Teresa Wilderness

5. Which best describes the terrain of the Wilderness of Rocks?

A) A sub-alpine garden of sculpted granite formations
B) A loose, exposed ridgeline descent
C) A high-desert grassland bowl
D) A deep granite-walled canyon corridor

6. Romero Pass, the saddle where the AZT climbs toward the Wilderness of Rocks, sits at about what elevation?

A) About 8,000 ft
B) About 6,000 ft
C) About 4,500 ft
D) About 3,640 ft

7. Marshall Gulch, at the top of Summerhaven's road, sits at roughly what elevation?

A) About 4,500 ft
B) About 6,000 ft
C) About 8,000 ft
D) About 4,700 ft

8. Which landmark marks the boundary between Passage 11 and Passage 12?

A) Molino Basin
B) Gordon Hirabayashi Campground
C) Romero Pass
D) Marshall Gulch

9. Romero Pass sits on the eastern edge of which protected area?

A) Oracle Ridge corridor
B) Bighorn Sheep Management Area
C) Molino Basin grassland
D) Pusch Ridge Wilderness

10. Which statement about Marshall Gulch is NOT correct?

A) It sits at about 8,000 ft
B) It marks the Passage 11/12 boundary
C) Lemmon Creek flows near its saddle
D) It is the low point of Passage 11 at about 3,640 ft

11. At the start of which passage must AZT hikers cross the Catalina (Hitchcock) Highway on foot?

A) Passage 9
B) Passage 10
C) Passage 11
D) Passage 12

12. The Catalina Highway climbs roughly how much from Tucson to Mount Lemmon?

A About 6,000 ft
B About 3,640 ft
C About 8,200 ft
D About 2,300 ft

13. The Catalina (Hitchcock) Highway carries what federal designation?

A National Historic Trail
B National Scenic Byway
C National Wilderness Area
D National Recreation Area

14. The AZT's Catalina Highway crossing lies just south of which landmark?

A Marshall Gulch
B Wilderness of Rocks
C Summerhaven
D Gordon Hirabayashi Campground

15. What is the other common name for the Catalina Highway?

A Hitchcock Highway
B Lemmon Highway
C Oracle Highway
D Sabino Highway

16. Which best describes the West Fork of Sabino Canyon?

A A high-desert grassland basin at about 4,500 ft
B A sub-alpine granite garden between two passes
C A deep, granite-walled corridor and the low point of Passage 11
D A loose ridgeline descent from Summerhaven

17. Molino Basin, on the lower south slope of the Catalinas, sits at about what elevation?

A About 3,640 ft
B About 6,000 ft
C About 8,200 ft
D About 4,500 ft

18. Hutch's Pool and the waters of Sabino Creek are found in which landmark?

A West Fork of Sabino Canyon
B Molino Basin
C Marshall Gulch
D Red Ridge

19. Which best describes Molino Basin?

A A sub-alpine garden of sculpted granite
B A high-desert grassland bowl crossed by the Catalina Highway
C A granite-walled canyon holding Hutch's Pool
D A saddle on the Romero Trail

20. The AZT drops into Molino Basin at the end of which passage's descent?

A Passage 9
B Passage 12
C Passage 10
D Passage 11

21. 'Red Ridge' is the official alternate name the ATA and Forest Service use for which passage?

A Passage 12
B Passage 9
C Passage 11
D Passage 10

22. Gordon Hirabayashi Campground, the Passage 10/11 boundary, sits at about what elevation?

A About 8,200 ft
B About 6,000 ft
C About 4,700 ft
D About 4,500 ft

23. Passage 10 involves roughly how much cumulative elevation gain across its hot, open miles?

A About 5,000 ft
B About 2,300 ft
C About 8,200 ft
D About 4,700 ft

24. Red Ridge is the opening ridgeline descent from which place at the start of Passage 12?

A Molino Basin
B Romero Pass
C Oracle
D Summerhaven

25. Gordon Hirabayashi Campground is open year-round but has what notable limitation?

A It floods seasonally
B It sits above 8,000 ft
C It is waterless
D It is closed in summer

Go deeper

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STUDY AZT: Rincons & Catalinas in the FlashFeed app flashfeedlearningapp.com/packs/azt-rincon-catalina

LESSON 16 OF 19

Permits, Logistics and Closures

Permits and rules · Resupply, seasons and the bighorn bypass

WHAT YOU'LL BE ABLE TO DO

- Explain Saguaro NP's permit system — $8 per site per night, bookings two months ahead, and only Grass Shack and Manning Camp on-trail.
- Recognize the mountain-bike and equestrian restrictions in the Rincon and Pusch Ridge Wilderness areas.
- Describe the Pusch Ridge bighorn protections — the Jan 1-Apr 30 off-trail limit, the 400-foot buffer, the year-round dog ban, and the 11e bypass.
- Identify the resupply towns of Summerhaven and Oracle and the typical spring-northbound timing.

The rules change underfoot on this stretch. One passage runs through a national park with strict permits and designated-only camping; the next crosses national forest where you can largely camp at will. Layered on top are wildlife closures, resupply logistics, and the question of when to walk it at all. Getting these right is as much a part of the planning as water and mileage.

Permits and rules

The single most regulated section is **Passage 9, inside Saguaro National Park**. There is no dispersed camping anywhere in the park and no campfires — every overnight must be at a reserved, designated site, of which only two touch the AZT: **Grass Shack** (about 5,200 ft, three sites) and **Manning Camp** (about 7,920 ft, six sites). Reserve them on recreation.gov, where bookings open two months ahead; pick your entry date and site, pay the **$8 per-site, per-night** fee, and carry the printed or saved permit PDF, because compliance is strictly enforced. Park entry is a separate charge, covered by an America the Beautiful pass. Because the park forbids dispersed camping outright, your daily mileage on the big Rincon climb has to be planned around reaching one of those two sites — there is no legal fallback.

Step onto the **Coronado National Forest** (Passages 10, 11, and 12) and the posture flips: no overnight permit is required at all. The usual forest rules apply — a 14-day stay limit, no camping within 200 feet of a water source, and none within a mile of a developed campground — but the freedom to camp where you like is a real contrast with the park. One more rule worth knowing if you ride: **mountain bikes are prohibited** in the Rincon Mountain Wilderness (Passage 9) and the Pusch Ridge Wilderness portion of Passage 11, and cyclists must use the Pusch Ridge Bypass, Passage 11e, instead.

Resupply, seasons and the bighorn bypass

Logistically, this stretch is unusually friendly because the trail walks right through a resupply town. **Summerhaven**, at the start of Passage 12, has a general store that holds packages and carries limited groceries, a post office, the Cookie Cabin and Sawmill Run for hot food, and lodging at the hotel and

rental cabins — a rare chance to resupply without leaving the trail. At the north end, **American Flag Ranch Trailhead** sits about four miles from **Oracle**, which has a small grocery and shuttle access; Tucson-based services like Finding True North run shuttles and hold resupply boxes. As for timing, most hikers go **northbound in spring**, starting early-to-mid March, which places the high country in late March and April — moderate temperatures, snowmelt water, and the tail end of the bighorn restrictions. Southbound in October–November works too, but demands sharper water and snow planning.

That bighorn reference points to the stretch's key wildlife rules. From **January 1 to April 30 each year**, a Coronado National Forest order bars travel more than 400 feet off system trails within the Bighorn Sheep Management Area of the Pusch Ridge Wilderness, protecting lambing desert bighorn; the main AZT route stays on-trail, but the restriction shapes camping and off-trail options every spring. **Dogs are banned year-round** — not just during lambing — anywhere in that management area, because even leashed dogs stress the sheep. For anyone with a dog, and for equestrians (the northern Passage 11 trail is too narrow, steep, and rocky for stock), the answer is the same: take **Passage 11e, the Pusch Ridge Wilderness Bypass**, a gentler, better-watered line that links the Bug Springs, Green Mountain, Incinerator Ridge, Butterfly, and Crystal Spring trails around the wilderness.

Key concepts

Grass Shack

- A reservable, designated overnight site inside the national-park section, where dispersed camping and campfires are both banned.
- It's the lower of the only two designated sites that touch the trail in Passage 9, at roughly 5,200 feet.
- With just three sites and an $8 per-night fee booked on recreation.gov, it's the smaller, lower-elevation of the pair.

Manning Camp

- The higher of only two reserved, designated overnight sites the trail touches inside the national park.
- It sits at about 7,920 feet with six sites — the loftier of Passage 9's two trailside options.
- Because the park forbids dispersed overnight stays, hikers must plan the big Rincon climb around reaching this ~7,920-foot, six-site spot.

Summerhaven

- A rare on-trail resupply stop where the route walks straight through town, no side trip needed.
- At the start of Passage 12, it has a general store that holds packages, a post office, and hotel-and-cabin lodging.
- Its Cookie Cabin and Sawmill Run serve hot food to hikers passing through this mountain village.

Oracle

- A town near the northern end of this stretch offering a small grocery and shuttle access.
- It lies about four miles off-trail from the American Flag Ranch Trailhead.
- Tucson shuttle outfits like Finding True North hold resupply boxes for hikers detouring to this community.

Key facts

Saguaro's two backcountry camps on the AZT

Inside Saguaro National Park, the only legal AZT camps are Grass Shack (~5,200 ft, 3 sites) and Manning Camp (~7,920 ft, 6 sites), both reserved in advance on recreation.gov. Dispersed camping is banned park-wide, and so are campfires — plan your mileage to reach a reserved site.

No permit needed on the Coronado forest

No overnight permit is required to camp on Coronado National Forest land (Passages 10, 11, and 12), though the usual rules apply: a 14-day stay limit, no camping within 200 feet of a water source, and none within a mile of a developed campground. The contrast with Saguaro NP's strict permit system is sharp.

Where bikes can't go

Mountain bikes are prohibited in the Rincon Mountain Wilderness (Passage 9) and in the Pusch Ridge Wilderness portion of Passage 11. Cyclists must detour onto the Pusch Ridge Wilderness Bypass (Passage 11e), the only legal mountain-bike route through that section.

Book two months out

Saguaro National Park backcountry reservations open on recreation.gov two months before your entry date. Reserve a designated site, pay the $8 per-site, per-night fee, and carry the permit — enforcement is strict.

The cyclist's detour

Cyclists blocked by the Pusch Ridge Wilderness closure have one legal workaround: the Pusch Ridge Wilderness Bypass, or Passage 11e.



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Resupply in Summerhaven

Summerhaven sits right on the AZT at the start of Passage 12 — a rare on-trail resupply. The Mt. Lemmon General Store holds packages and carries limited groceries; the Cookie Cabin and Sawmill Run feed hungry hikers; and the post office holds boxes. Lodging is available at the hotel and rental cabins.

Resupply at Oracle

American Flag Ranch Trailhead, the end of Passage 12, sits about 4 miles from Oracle via Mount Lemmon Road. Oracle has a small grocery and is reachable by shuttle; Tucson-based services such as Finding True North run shuttles and hold resupply boxes for hikers.

Best season and direction

Most hikers tackle Passages 8–12 northbound in spring, starting around early-to-mid March. That times the high country for late March and April — moderate temperatures, snowmelt water, and the tail end of the January–April bighorn restrictions. Southbound in October–November works too, but demands careful water and snow planning.

The bighorn lambing restriction

From January 1 to April 30 each year, a Coronado National Forest order bars travel more than 400 feet off system trails within the Bighorn Sheep Management Area of the Pusch Ridge Wilderness, protecting lambing desert bighorn. The AZT's main Passage 11 route stays on-trail, but the rule shapes camping and off-trail options every spring.

Dogs are banned in the bighorn area

Dogs are prohibited year-round — not only during lambing season — within the Bighorn Sheep Management Area of the Pusch Ridge Wilderness, because even leashed dogs stress the sheep. AZT hikers traveling with a dog must take the Pusch Ridge Wilderness Bypass, Passage 11e, instead of the main route.

Passage 11e — the Pusch Ridge bypass

Passage 11e is the official AZT alternate around the Pusch Ridge Wilderness, used by dog owners and equestrians. It links the Bug Springs, Green Mountain, Incinerator Ridge, Butterfly, and Crystal Spring trails, with water at Novio, Crystal, and Green Springs — a gentler, more water-rich line than the steep main passage.

Why horses skip northern Passage 11

The ATA advises against equestrian use of the northern Santa Catalina section of Passage 11 — the trail there is narrow, steep, and rocky. Horse parties are routed onto the Pusch Ridge Wilderness Bypass (11e) instead, which is graded for stock.

By the numbers

Saguaro NP backcountry camping fee per site, per night (USD)

8 USD

Distance from American Flag Ranch Trailhead to Oracle (mi)

4 mi

How far off system trails travel is barred in the bighorn lambing area (ft)

400 ft

Matched pairs

Each item on the left goes with the one on the right.

Hikers with dogs at Pusch Ridge → Must take the Passage 11e bypass year-round

Bighorn lambing restriction window → In force from January 1 to April 30 each year

Step by step

Reserve a Saguaro NP backcountry permit for Passage 9

1. On recreation.gov, search 'Saguaro National Park Wilderness Permits.'
2. Pick your entry date and a designated site — Grass Shack or Manning Camp; reservations open two months ahead.
3. Pay the per-site, per-night fee (park entry is separate; an America the Beautiful pass covers it).
4. Save or print the permit PDF and carry it in the park — compliance is strictly enforced and there is no dispersed camping.

Self-test

Answer each question from memory, then check your work against the answer key.

1. How far in advance do Saguaro NP backcountry site reservations open on recreation.gov?

A Two months ahead
B Six months ahead
C Two weeks ahead
D One year ahead

2. What is the backcountry camping fee at Saguaro National Park, charged per site per night?

A $4
B $12
C $8
D $20

3. Which website do AZT hikers use to reserve Saguaro NP's designated backcountry sites?

A nps.gov walk-up only
B ReserveAmerica
C Finding True North
D recreation.gov

4. Which two designated camps are the only legal AZT overnight sites inside Saguaro National Park?

A Summerhaven and American Flag
B Grass Shack and Manning Camp
C Manning Camp and Oracle
D Grass Shack and Summerhaven

5. How far in advance do Saguaro NP backcountry site reservations open for booking?

A Six months ahead
B Two months ahead
C One year ahead
D Two weeks ahead

6. Where are mountain bikes prohibited on this stretch of the AZT?

A Summerhaven area (Passage 12)
B American Flag Ranch (Passage 12)
C Rincon Mountain Wilderness (Passage 9)
D Coronado National Forest (Passage 10)

7. What is the only legal mountain-bike route around the Pusch Ridge Wilderness?

A Pusch Ridge Wilderness Bypass (Passage 11e)
B Grass Shack Trail
C Mount Lemmon Road
D Bug Springs Trail out-and-back

8. Why does the ATA route equestrians off the northern Santa Catalina part of Passage 11?

A The bighorn lambing closure bars all stock
B Bikes are given right of way there
C There is no water anywhere on that stretch
D The trail there is narrow, steep, and rocky

9. A cyclist riding the AZT reaches the Pusch Ridge Wilderness. What must they do?

A Camp and wait for a ranger escort
B Detour onto Passage 11e
C Buy a bike permit on recreation.gov
D Walk the bike through the wilderness

10. Which statement about bikes and horses on this stretch is NOT true?

A Northern Passage 11 is too narrow and rocky for stock
B Equestrians are routed onto Passage 11e
C Bikes may ride the Pusch Ridge Wilderness part of Passage 11
D Bikes are barred from the Rincon Mountain Wilderness

11. During what window is off-trail travel restricted for bighorn lambing at Pusch Ridge?

A January 1 to April 30
B March 1 to June 30
C May 1 to August 31
D January 1 to March 31

12. How far off system trails may hikers not go inside the Bighorn Sheep Management Area during the closure?

A More than 1,000 feet
B More than 50 feet
C More than 200 feet
D More than 400 feet

13. How long are dogs banned from the Bighorn Sheep Management Area?

A Only January 1 to April 30
B Year-round
C Only during summer
D Only from October 1 to December 31

14. An AZT hiker traveling with a dog reaches Pusch Ridge. What is the required move?

A Leash the dog on the main route
B Camp 400 feet off the trail
C Reserve a permit on recreation.gov
D Take Passage 11e, the bypass

15. Which statement about the Pusch Ridge bighorn protections is NOT true?

A Dogs are allowed if kept leashed
B Dogs are banned year-round
C Off-trail travel over 400 feet is barred Jan–Apr
D The rules protect lambing desert bighorn

16. In what season and direction do most hikers walk the Rincon–Catalina stretch?

A. Northbound in fall, starting October–November
B. Southbound in summer, starting June–July
C. Northbound in spring, starting early-to-mid March
D. Southbound in spring, starting early-to-mid March

17. Which town sits right on the AZT at the start of Passage 12 for an on-trail resupply?

A. Manning Camp
B. Oracle
C. Tucson
D. Summerhaven

18. About how far is American Flag Ranch Trailhead from Oracle?

A. About 12 miles
B. About 9 miles
C. About 4 miles
D. About 6 miles

19. What resupply service does Summerhaven's general store provide?

A. It runs the Finding True North shuttle
B. It holds packages and carries limited groceries
C. It issues recreation.gov permits
D. It is the American Flag Ranch Trailhead

20. An early-to-mid-March northbound start places hikers in the high country during which months?

A. Late March and April
B. September and October
C. June and July
D. December and January

Go deeper

ONLINE This lesson on the web flashfeedlearningapp.com/study-guides/azt-rincon-catalina/permits-logistics-and-closures

STUDY AZT: Rincons & Catalinas in the FlashFeed app flashfeedlearningapp.com/packs/azt-rincon-catalina

LESSON 17 OF 19

History and Culture

People, places and geology

WHAT YOU'LL BE ABLE TO DO

- Explain the deep origins of the range and its Spanish name — the ~30-million-year granite core-complex uplift and Kino's ~1697 naming for St. Catherine.
- Recognize the O'odham name 'Babad Do'ag' (Frog Mountain), predating the Spanish name for the Catalinas.
- Identify the historical figures the trail's landmarks honor — Gabe Zimmerman, Gordon Hirabayashi, and Buffalo Bill Cody.

The ground under this trail carries deep human and geological history, and knowing it changes how the miles feel. The names on the map — a trailhead, a campground, a ranch, a mountain range — each open onto a story: of civil rights and conscience, of frontier showmen and territorial post offices, of indigenous peoples and the slow rise of granite from miles below. This lesson gathers those stories.

People, places and geology

The stretch is bracketed by two namesakes worth knowing. At the southern end, the **Gabe Zimmerman Trailhead** honors an aide to U.S. Representative Gabrielle Giffords — an avid hiker who helped win the AZT's 2009 designation as a National Scenic Trail, and who was killed in the January 8, 2011 Tucson shooting, the first congressional staffer slain in the line of duty. A mural and one of his poems are set in stone at the trailhead. Farther north, **Gordon Hirabayashi Campground** carries an even heavier history. Hirabayashi was a Japanese-American student who in 1942 defied the wartime curfew and internment orders as unconstitutional. Convicted, he was sent to the very prison camp in these mountains — reportedly hitchhiking there himself to serve his sentence. His conviction was overturned in 1987, and in 1999 the Forest Service renamed the campground in his honor; he attended the dedication.

That campground sits on the site of the **Catalina Federal Honor Camp**, a minimum-security prison with no fence — its boundary simply marked by white-painted rocks — whose inmates built much of the Catalina Highway by hand beginning in the late 1930s. The camp held draft resisters, conscientious objectors, and Japanese Americans, and closed in 1951 when the road was finished; foundations and interpretive panels remain at the renamed site. The trail's northern end holds frontier history of a different flavor. Near where Passage 12 ends, the **American Flag Ranch** house, built in 1877, became the American Flag Post Office in 1880 and is believed to be the oldest standing territorial post-office building in Arizona. And just off the Oracle Ridge Trail stands **La Casa del High Jinks**, the ranch tied to **Buffalo Bill Cody**, who staked the High Jinks gold mine here in April 1912 and kept a cabin until his death in 1917; the Pueblo-style house, completed in 1928, is on the National Register of Historic Places.

Beneath all of it lies the deep story. The Catalinas and Rincons form the **Catalina–Rincon metamorphic core complex**: starting about 30 million years ago, a mass of granite rose from miles deep along the Catalina Detachment Fault, doming upward and exposing ancient schists and gneisses beside younger granite. That uplift is the reason hikers scramble over sculpted granite boulders through Passages 9 to 11. The human names are older still in places — the Tohono O'odham knew the Santa Catalinas as **Babad Do'ag**, "Frog Mountain," long before the Jesuit missionary **Eusebio Francisco Kino** named them around 1697 for St. Catherine of Alexandria. Walking this stretch, you move through all of these layers at once: bedrock raised from the depths, indigenous homeland, frontier outpost, and a 21st-century trail named for people who gave something to it.

Key concepts

Gordon Hirabayashi

- A Japanese-American student whose principled World War II stand is memorialized by a campground on this trail.
- In 1942 he defied the wartime curfew and internment orders as unconstitutional, and was sent to a prison in these very mountains.
- Reportedly hitchhiking to serve his sentence, he saw his conviction overturned in 1987 and attended the 1999 dedication renaming the site for him.

Buffalo Bill Cody

- A celebrated frontier showman whose name attaches to a Pueblo-style ranch house off the Oracle Ridge Trail.
- In April 1912 he staked the High Jinks gold mine here and kept a cabin nearby until his death in 1917.
- His La Casa del High Jinks, completed in 1928, now sits on the National Register of Historic Places.

Eusebio Francisco Kino

- A European missionary who left his mark on this region's map late in the 1600s.
- Around 1697 he named the Santa Catalinas for St. Catherine of Alexandria.
- This Jesuit's Spanish name for the range came long after the Tohono O'odham's 'Frog Mountain.'

Gabe Zimmerman

- An avid hiker and congressional aide honored by a trailhead at the southern end of this stretch.
- He helped win the trail's 2009 National Scenic Trail designation while working for U.S. Rep. Gabrielle Giffords.
- Killed in the January 8, 2011 Tucson shooting — the first congressional staffer slain in the line of duty — he's remembered by a mural and a poem set in stone.

Key facts



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Gordon Hirabayashi, resister of conscience

Gordon Hirabayashi was a Japanese-American student who in 1942 defied the WWII curfew and internment orders as unconstitutional. Convicted, he was sent to the prison camp in these mountains — reportedly hitchhiking there himself. His conviction was overturned in 1987, and in 1999 the Forest Service renamed the campground in his honor; he attended the dedication.

The Catalina Federal Honor Camp

Beginning in the late 1930s, inmates of the Catalina Federal Honor Camp — a minimum-security prison with no fence, its boundary marked by white-painted rocks — built much of the Catalina Highway by hand. It held draft resisters, conscientious objectors, and Japanese Americans. The camp closed in 1951 when the road was finished; foundations and interpretive panels remain at the renamed site.

American Flag Ranch — a territorial relic

The American Flag Ranch house, built in 1877, became the American Flag Post Office in 1880 and is believed to be the oldest standing territorial post-office building in Arizona. Passage 12 ends here; the site is on the National Register of Historic Places and is cared for by the Oracle Historical Society.

Matched pairs

Each item on the left goes with the one on the right.

Babad Do'ag → The Tohono O'odham name for the Santa Catalina Mountains ('Frog Mountain')

Who named the Santa Catalina Mountains
→ Jesuit missionary Eusebio Francisco Kino, around 1697, for St. Catherine of Alexandria

Self-test

Answer each question from memory, then check your work against the answer key.

1. About when did the granite of the Catalina–Rincon metamorphic core complex begin rising toward the surface?

- A About 3 million years ago
- B About 300 million years ago
- C About 30 million years ago
- D About 300,000 years ago

2. Who named the Santa Catalina Mountains, and for whom were they named?

- A Jesuit missionary Eusebio Francisco Kino, for St. Catherine of Alexandria
- B Jesuit missionary Francisco Garcés, for St. Catherine of Siena
- C Franciscan friar Junípero Serra, for St. Clare of Assisi
- D Conquistador Francisco Coronado, for the Virgin of Guadalupe

3. Around what year did the Jesuit missionary give the Santa Catalina Mountains their Spanish name?

- A Around 1540
- B Around 1775
- C Around 1848
- D Around 1697

4. Along which fault did the granite mass rise from miles deep to form the core complex?

- A The San Andreas Fault
- B The Catalina Detachment Fault
- C The Sonoran Rift Fault
- D The Rincon Thrust Fault

5. What geological formation do the Catalinas and Rincons together make up?

- A A coastal batholith terrane
- B A layered sedimentary basin
- C The Catalina–Rincon metamorphic core complex
- D A collapsed volcanic caldera field

6. What does the O'odham name 'Babad Do'ag' mean?

- A Frog Mountain
- B Bear Mountain
- C Sky Island
- D Thunder Peak

7. Which people knew the Santa Catalina Mountains as Babad Do'ag?

- A The Navajo
- B The Hopi
- C The Western Apache
- D The Tohono O'odham

8. Babad Do'ag was the indigenous name for which mountain range?

- A The Superstition Mountains
- B The Santa Catalina Mountains
- C The Rincon Mountains
- D The Santa Rita Mountains

9. How does the name Babad Do'ag relate to the range's Spanish name?

A. It was a direct translation of the Spanish name
B. It was coined by the missionary Kino
C. It predates the Spanish name by centuries
D. It replaced the Spanish name in 1697

10. Which statement about Babad Do'ag is NOT true?

A. It predates the Spanish name given around 1697
B. It means 'St. Catherine' in the O'odham language
C. The Tohono O'odham used it for the Santa Catalinas
D. It means 'Frog Mountain'

11. Gabe Zimmerman, the southern trailhead's namesake, was an aide to which member of Congress?

A. Gabrielle Giffords
B. Raúl Grijalva
C. Barbara Lee
D. John Lewis

12. Gordon Hirabayashi is honored for defying what during World War II?

A. The military draft for the Pacific front
B. Wartime food rationing rules
C. Mandatory factory conscription
D. The curfew and Japanese-American internment orders

13. What did Buffalo Bill Cody stake near Oracle in April 1912?

A. The High Jinks gold mine
B. A silver claim on Oracle Ridge
C. A stagecoach relay station
D. A cattle homestead

14. Which trail landmark was renamed to honor a man who resisted wartime internment?

A. La Casa del High Jinks
B. Gordon Hirabayashi Campground
C. American Flag Ranch
D. Gabe Zimmerman Trailhead

15. Which pairing of a landmark and the person it honors is NOT correct?

A. Gordon Hirabayashi Campground — a WWII resister of conscience
B. Gabe Zimmerman Trailhead — a Giffords aide and hiker
C. American Flag Post Office — Buffalo Bill Cody
D. La Casa del High Jinks — Buffalo Bill Cody

Go deeper

ONLINE This lesson on the web flashfeedlearningapp.com/study-guides/azt-rincon-catalina/history-and-culture

STUDY AZT: Rincons & Catalinas in the FlashFeed app flashfeedlearningapp.com/packs/azt-rincon-catalina

LESSON 18 OF 19

Quick Recall — Key places & terms

The trail glossary

WHAT YOU'LL BE ABLE TO DO

- Recall the two range high points (Mica Mountain, Mount Lemmon) and why these ranges are called sky islands.
- Recall the key water landmarks (Manning Camp, Romero Pass, Hutch's Pool) and where the longest dry carry occurs.
- Recall the connector, ridge, and terminus landmarks (Redington Pass, Red Ridge, American Flag Ranch) and the O'odham name.
- Recognize Saguaro National Park's permit rule and the two named range summits by name.

This lesson is a rapid drill on the names and landmarks that define this stretch of the Arizona Trail. Once these come without hesitation, you can read a trip report, a water report, or a FarOut comment and instantly place what's being discussed.

The trail glossary

Start with the high points of the two ranges. **Mica Mountain** (~8,666 ft) is the highest point in the Rincon Mountains, and **Mount Lemmon** (~9,157–9,171 ft, depending on survey) is the highest point in the Santa Catalinas — though the trail bypasses both summits. The cool, isolated, forested mountains they crown are **sky islands**: ranges marooned in desert, preserving stacked life zones.

Then the waypoints that organize a hiker's plan. **Manning Camp** is the most reliable water and the premier designated campsite in the high Rincons. **Romero Pass** is the Catalina saddle reached by a punishing vertical-mile climb from the Sabino/Hutch's Pool area, and **Hutch's Pool** is the perennial Sabino Creek pool at the base of that climb. **Redington Pass** is the hot, dry, low saddle separating the two ranges — and the place where the **longest dry water carry** of the whole stretch occurs, since the connector camps have no reliable water. The exposed, shadeless descent of Passage 12 follows **Red Ridge** and Oracle Ridge and ends at **American Flag Ranch**, the northern trailhead and home to the oldest standing territorial post office in Arizona.

Finally, two names that anchor the region's culture and rules. The Tohono O'odham call the Catalinas **Babad Do'ag**, meaning "Frog Mountain" — a name older than the Spanish "Santa Catalina." And **Saguaro National Park** is the park that protects the Rincons, where dispersed camping is banned and a recreation.gov permit is required to overnight. Know these twelve places and terms cold and you carry the working map of this stretch in your head — the ranges, the water, the rules, and the lore.

Key concepts

Mica Mountain

- A summit the trail deliberately passes below rather than over.
- It's the highest peak in the Rincons, near 8,666 feet.
- At about 8,666 feet it crowns the Rincon range — the one Saguaro National Park protects.

Mount Lemmon

- The loftiest summit anywhere on this stretch, though the trail routes around it.
- At 9,157 feet it's the highest point of the Santa Catalinas.
- This 9,157-foot peak tops the Catalinas — higher than the Rincons' high point, yet still bypassed by the path.

Romero Pass

- A high Catalina saddle earned only by a brutal, sustained climb.
- Reaching it means gaining roughly a vertical mile up from the Sabino Creek area.
- This saddle sits atop a punishing vertical-mile ascent from the Hutch's Pool area.

Hutch's Pool

- A dependable water source at the very foot of the stretch's most punishing climb.
- It's a perennial pocket of water along Sabino Creek.
- This year-round Sabino Creek water sits at the base of the vertical-mile ascent up to Romero Pass.

American Flag Ranch

- The landmark that marks the northern trailhead of this stretch.
- The exposed, shadeless descent of Red Ridge ends right here.
- It's home to the oldest standing territorial post office in Arizona.

Matched pairs

Each item on the left goes with the one on the right.

Mica Mountain → Highest point in the Rincon Mountains (~8,666 ft)

Manning Camp → Most reliable water + designated camp in the high Rincons

Mount Lemmon → Highest point in the Santa Catalinas (~9,157–9,171 ft, sources vary)

Sky island → An isolated forested range marooned in desert

Romero Pass → Catalina saddle reached by a vertical-mile climb from Hutch's Pool

Hutch's Pool → Perennial Sabino Creek pool at the base of the big Catalina climb

Babad Do'ag → Tohono O'odham name for the Catalinas ('Frog Mountain')

Redington Pass → Hot, dry saddle separating the Rincons and Catalinas

Red Ridge → The exposed, shadeless ridge descent of Passage 12

Across Redington Pass → Where the longest dry water carry of the stretch occurs

American Flag Ranch → Northern trailhead; oldest standing territorial post office in Arizona

Saguaro National Park → Park where dispersed camping is banned and permits are required

Self-test

Answer each question from memory, then check your work against the answer key.

1. Why are the Rincons and Santa Catalinas described as 'sky islands'?

A. They are cool, forested ranges marooned in desert, preserving stacked life zones
B. They are high plateaus that stay above the winter snow line year-round
C. They are granite domes left exposed after softer rock eroded away
D. They are desert basins that trap cool air between higher ranges

2. What is the highest point of the Rincon Mountains?

A. Rincon Peak
B. Mount Lemmon
C. Mica Mountain
D. Mount Bigelow

3. At 9,157 ft, which peak is the highest point of the Santa Catalinas?

A. Rincon Peak
B. Mount Lemmon
C. Mica Mountain
D. Mount Wrightson

4. About how high is Mica Mountain, the Rincon high point?

A. About 6,010 ft
B. About 9,157 ft
C. About 7,320 ft
D. About 8,666 ft

5. Which statement is NOT true of the sky islands the trail crosses?

A. They are desert basins that trap cool air between higher ranges
B. They are forested ranges isolated in surrounding desert
C. They preserve stacked life zones one atop another
D. The trail bypasses both range summits

6. What is the most reliable water and premier designated campsite in the high Rincons?

A. Hutch's Pool
B. Romero Pass
C. American Flag Ranch
D. Manning Camp

7. Which perennial water source, fed by Sabino Creek, sits at the base of the big Catalina climb?

A. Manning Camp
B. Hutch's Pool
C. Lemmon Creek
D. Italian Spring

8. How is Romero Pass reached from the Sabino/Hutch's Pool area?

A. A short flat walk along the creek
B. A shuttle road over the range
C. A punishing vertical-mile climb
D. A gentle switchbacking descent

9. Where does the longest dry water carry of this stretch occur?

A. Across Redington Pass
B. Over Mount Lemmon
C. Near Manning Camp
D. At Hutch's Pool

10. Which statement about water on this stretch is NOT true?

A. Hutch's Pool is a perennial Sabino Creek pool
B. The connector camps at Redington Pass have reliable water
C. Manning Camp is the most reliable water in the high Rincons
D. The longest dry carry is across Redington Pass

11. Which hot, dry, low saddle separates the Rincons from the Catalinas?

A. Oracle Ridge
B. Romero Pass
C. Redington Pass
D. Manning Camp

12. What is the exposed, shadeless ridge descent of Passage 12?

A. Babad Do'ag
B. Romero Pass
C. Redington Pass
D. Red Ridge

13. American Flag Ranch, the northern trailhead, is also home to what?

A. The oldest saloon in the Arizona Territory
B. The oldest standing territorial post office in Arizona
C. The largest trailhead parking lot on the trail
D. The first Forest Service ranger station in Arizona

14. What is the Tohono O'odham name for the Catalinas, meaning 'Frog Mountain'?

A. Santa Catalina
B. Rincon
C. Baboquivari
D. Babad Do'ag

15. The Red Ridge descent of Passage 12 ends at which trailhead?

A. American Flag Ranch Trailhead
B. Loma Alta Trailhead
C. Gabe Zimmerman Trailhead
D. Marshall Gulch Trailhead

16. Which landmark is the hot, dry, low saddle separating the Rincons from the Santa Catalinas?

A. Oracle Ridge
B. Romero Pass
C. Redington Pass
D. American Flag Ranch

17. The connector camps near which landmark force the longest dry water carry of this stretch?

A Hutch's Pool
B Oracle Ridge
C Manning Camp
D Redington Pass

18. Which park protects the Rincons, banning dispersed camping and requiring a permit?

A Saguaro National Park
B Coronado National Forest
C Catalina State Park
D Sabino Canyon Recreation Area

19. To camp overnight in Saguaro National Park's Rincons, what do you need?

A A free self-issued trail permit
B A Coronado forest campfire permit
C A recreation.gov permit
D No permit; first-come camping is allowed

20. Which summit crowns the Rincon Mountains that Saguaro National Park protects?

A Mount Wrightson
B Mica Mountain
C Rincon Peak
D Mount Lemmon

21. Which pair names the two range summits highlighted in this stretch?

A Mount Lemmon and Mount Wrightson
B Mica Mountain and Mount Lemmon
C Mount Wrightson and Rincon Peak
D Baboquivari and Mount Graham

22. Which statement about overnighting in the Rincons' Saguaro National Park is NOT true?

A Dispersed camping is allowed anywhere in the park
B The park protects the Rincon Mountains
C Camping is limited to designated sites
D A recreation.gov permit is required to overnight

Go deeper

ONLINE This lesson on the web flashfeedlearningapp.com/study-guides/azt-rincon-catalina/quick-recall-key-places-and-terms

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LESSON 19 OF 19

Key Concepts

Key Places

WHAT YOU'LL BE ABLE TO DO

- Identify the two sky-island ranges that frame this stretch — the Rincon Mountains and the Santa Catalina Mountains.
- Recognize the hot connector saddle (Redington Pass) and the exposed descent (Oracle Ridge).
- Identify the protected areas along the route — Saguaro National Park and the Cienega Creek Natural Preserve.

A quick-recognition gallery of the key people, places, and things from AZT: Rincons & Catalinas.

Key Places

Rincon Mountains — This mountain range is located east of Tucson, Arizona. It features Mica Mountain, the highest point in the range. The range is known for its steep climbs and diverse ecosystems.

Santa Catalina Mountains — This mountain range is situated north of Tucson, Arizona. It includes the popular Mount Lemmon, a local recreational area. The range is characterized by its rugged terrain and pine forests.

Redington Pass — This low saddle connects the Rincon and Santa Catalina Mountains. It's known for its hot, dry conditions and limited shade. The pass is a crucial transition point for hikers on the Arizona Trail.

Oracle Ridge — This ridge descends from the Santa Catalina Mountains toward Oracle, Arizona. It offers sweeping views of the surrounding landscape. The trail along this ridge is known for its exposed and rocky terrain.

Saguaro National Park — This national park is located near Tucson, Arizona. It is famous for its iconic giant cacti and desert landscapes. The park is divided into two districts, one of which borders the Rincon Mountains.

Cienega Creek Natural Preserve — This preserve is located southeast of Tucson, Arizona. It features diverse habitats including riparian areas and grasslands. The preserve is part of the route connecting to the Rincon Valley.

Key concepts

Rincon Mountains

- This mountain range is located east of Tucson, Arizona.
- It features Mica Mountain, the highest point in the range.
- The range is known for its steep climbs and diverse ecosystems.

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Cienega Creek Natural Preserve

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- It features diverse habitats including riparian areas and grasslands.
- The preserve is part of the route connecting to the Rincon Valley.

Self-test

Answer each question from memory, then check your work against the answer key.

1. The Rincon Mountains sit in which direction relative to Tucson, Arizona?

A South of Tucson
B West of Tucson
C North of Tucson
D East of Tucson

2. What is the highest point in the Rincon Mountains?

A Rincon Peak
B Mica Mountain
C Mount Bigelow
D Mount Lemmon

3. Which popular recreational area is part of the Santa Catalina Mountains?

A Mount Lemmon
B Cienega Creek
C Mica Mountain
D Redington Pass

4. Which statement about the Santa Catalina Mountains is NOT true?

A It is known for pine forests
B It lies north of Tucson
C Its highest point is Mica Mountain
D It includes Mount Lemmon

5. Which option correctly matches both ranges to their location near Tucson?

A Rincons north, Catalinas east
B Rincons east, Catalinas north
C Rincons south, Catalinas west
D Rincons west, Catalinas south

6. What is Redington Pass, and what makes it notable on this stretch of the Arizona Trail?

A A high, forested ridge descending toward the town of Oracle
B A granite-domed summit that is the high point of the Rincons
C A shaded riparian canyon linking Tucson to the Rincon Valley
D A low, hot, dry saddle connecting the Rincon and Santa Catalina Mountains

7. Which feature descends from the Santa Catalina Mountains toward a nearby town?

A Mica Mountain
B Redington Pass
C Oracle Ridge
D Saguaro National Park

8. The trail along Oracle Ridge is best known for what kind of terrain?

A Exposed and rocky
B Sandy and flat
C Riparian and wet
D Shaded and forested

9. What conditions is Redington Pass known for?

A Snowy and high in elevation
B Hot and dry with limited shade
C Cool and wet with dense shade
D Humid and heavily forested

10. Which statement about Oracle Ridge is FALSE?

A It has exposed and rocky terrain
B It descends from the Santa Catalina Mountains
C It offers sweeping views of the landscape
D It is the low saddle connecting the two ranges

11. Saguaro National Park is most famous for what?

A Granite domes and waterfalls
B Pine forests and alpine lakes
C Giant cacti and desert landscapes
D Coastal dunes and wetlands

12. Into how many districts is Saguaro National Park divided?

A Two
B Four
C Five
D Three

13. Where is the Cienega Creek Natural Preserve located relative to Tucson?

A Northwest of Tucson
B Directly west of Tucson
C Southeast of Tucson
D Directly north of Tucson

14. Which habitats does the Cienega Creek Natural Preserve feature?

A Pine forests and meadows
B Riparian areas and grasslands
C Alpine tundra and scree
D Coastal marsh and dunes

15. Which protected area has a district bordering the Rincon Mountains?

A Saguaro National Park
B Cienega Creek Natural Preserve
C Mount Lemmon Recreation Area
D Oracle State Park

Go deeper

ONLINE This lesson on the web flashfeedlearningapp.com/study-guides/azt-rincon-catalina/key-concepts

STUDY AZT: Rincons & Catalinas in the FlashFeed app flashfeedlearningapp.com/packs/azt-rincon-catalina

Answer key

Lesson 1: Route Overview

1. C Passage 10 (Redington Pass)

Passage 10, Redington Pass, is the low saddle joining the two ranges — rolling grassland and dirt road with little shade. The Rincon passages (8, 9) and Oracle Ridge (12) sit on the ranges themselves.

2. A Rincon Valley, Rincon Mountains, Redington Pass, Santa Catalinas, Red Ridge

NOBO runs 8 to 12: Rincon Valley, then the Rincon Mountains climb, over Redington Pass, up the Santa Catalinas, and down Oracle Ridge. Starting at Oracle Ridge is backwards: that is where SOBO hikers begin.

3. D Passage 9 (Rincon Mountains)

Passage 9, the Rincon Mountains, ascends from Saguaro National Park toward Mica Mountain — the longest, highest passage and one of the AZT's biggest sustained climbs.

4. B The Rincon and Santa Catalina Mountains

The segment links Tucson's two sky islands — the Rincons to the east and the Santa Catalinas to the north — connected by the low saddle of Redington Pass.

5. B Davidson Canyon

Davidson Canyon is a trailhead where Passage 8 begins, not a passage itself. Rincon Valley, Redington Pass, and Red Ridge are Passages 8, 10, and 12.

6. C Passage 11 (Santa Catalina Mountains)

Passage 11 (Santa Catalina Mountains) crosses Pusch Ridge Wilderness and the Wilderness of Rocks toward Mount Lemmon.

7. A Santa Catalina Mountains

Passage 11 is named for the Santa Catalina Mountains that it crosses.

8. D Passage 12 (Red Ridge)

Passage 12 (Red Ridge) descends from Summerhaven, via Red Ridge and Oracle Ridge, to American Flag Ranch.

9. C Oracle Ridge

Passage 12 is named Oracle Ridge for the exposed ridge it descends.

10. B Rincon Valley

Compare: Romero Pass — A steep saddle in the Santa Catalinas that the AZT crosses after climbing roughly a vertical mile up from the Sabino Canyon / Hutch's Pool area. Reaching it is the hardest single climb of the Catalina passage, the gateway to the upper pine forests.

11. D Santa Catalina Mountains

Compare: Rincon Mountains — The range Passage 9 climbs, a different sky island south of Redington Pass. Tortolita Mountains and Tucson Mountains are separate ranges near Tucson that this five-passage stretch never enters.

12. A Red Ridge

Compare: Mica Mountain — The highest point in the Rincon Mountains, at roughly 8,666 ft. It tops out in cool mixed-conifer forest — a Pleistocene relic high above the desert. The AZT climbs into its forested flank but bypasses the actual summit.

13. B Mica Mountain, in the high pine forest

Passage 9 climbs from Saguaro National Park up toward Mica Mountain and the high pine forest. Mount Lemmon and Mount Bigelow are Catalina-range peaks reached via Passage 11, and Rincon Peak is a separate, lower summit elsewhere in the Rincons.

14. D Pusch Ridge Wilderness

Passage 11, the Santa Catalinas, crosses the Pusch Ridge Wilderness. Saguaro National Park belongs to Passage 9; Cienega Creek and Colossal Cave are on the Passage 8 desert approach.

15. A Cienega Creek Natural Preserve

Passage 8 crosses the Cienega Creek Natural Preserve and Colossal Cave Mountain Park. The Pusch Ridge Wilderness is on Passage 11; the other two options are protected areas elsewhere on the route.

16. C Colossal Cave Mountain Park

Passage 8 also crosses Colossal Cave Mountain Park on its way toward the Rincons.

17. C Rolling grassland and dirt road, little shade or water

Passage 10, Redington Pass, is a low, hot transition of rolling grassland and dirt road with little shade or water.

18. D The Rincon and Santa Catalina Mountains

Passage 10 is the low, hot transition zone linking the Rincon and Santa Catalina Mountains.

19. A Mexico and Canada

The ~5,000-6,000 ft climb from Sonoran desert scrub to Canadian-zone conifer forest compresses the life zones you'd cross traveling from Mexico to Canada into one day's ascent — the trail's defining vertical transect.

20. B Roughly 5,000 to 6,000 feet

The trail gains about 5,000 to 6,000 vertical feet from desert scrub to conifer forest on each range — the climb that compresses a continent's worth of life zones into a single day.

21. B Up to 20 degrees F

High-country temperatures run up to 20 degrees F cooler than the valley floor — why snow can linger up high while the desert bakes, and why hikers time the low passages for cool months.

22. A Canadian-zone conifer forest

The climb tops out in Canadian-zone conifer forest — the cool, wet life zone that makes the ascent feel like traveling from Mexico to Canada in one day.

23. D They time the low desert passages for cool months

Because the high country stays cooler, hikers schedule the hot, shadeless low passages for cool months and enjoy the pine zones — the temperature gradient shapes how the route is timed.

24. C The Rincons

NOBO tackles the big Rincon climb early, while legs are fresh. Oracle Ridge is the SOBO opener, and Redington Pass is the low saddle between the ranges.

25. C The exposed Oracle Ridge climb

SOBO begins with the shadeless Oracle Ridge ascent — the brutal opener — before the high Catalinas. The Rincon climb comes as a descent for SOBO hikers, at the very end.

26. A It opens with the exposed Oracle Ridge climb

Opening with the Oracle Ridge climb describes SOBO, not NOBO. Northbound front-loads the Rincons, passes up through the life zones, and ends by descending Oracle Ridge.

27. B With the long Rincon descent into the desert

SOBO ends with the long Rincon descent into the desert. Oracle Ridge was the SOBO opener, not the finish, and Mica Mountain lies off-trail.

28. D NOBO ends with the Oracle Ridge descent, while SOBO begins with the Oracle Ridge climb

NOBO finishes by descending Oracle Ridge; SOBO opens by climbing it. The reversed version swaps them, neither direction starts at Redington Pass, and it is NOBO — not SOBO — that front-loads the Rincons.

29. A Mica Mountain

The AZT skirts Mica Mountain, the Rincon high point, without tagging its summit. Mount Lemmon and Mount Bigelow are Catalina-range peaks, not Rincon peaks, and Rincon Peak is a separate, lower Rincon summit not on this bypass.

30. C Take an off-trail side trip

The named summits require off-trail side trips — the main AZT stays below them. It never routes over the peaks, so no on-trail option reaches the top.

31. B Mount Lemmon

The trail stays below Mount Lemmon, the Catalina high point. Mount Bigelow is a lower Catalina-range peak, while Mica Mountain and Rincon Peak are Rincon-range summits, not the Catalina high point.

32. D It sits well under the named peak elevations

Because the AZT bypasses both summits, its true high point is well under Mica Mountain and Mount Lemmon's elevations — it never reaches either peak.

33. A It routes directly over the summit of Mount Lemmon

The AZT never routes over Mount Lemmon's summit — it stays below it. The trail skirts Mica Mountain, stays below Mount Lemmon, and leaves the summits to off-trail detours.

Lesson 2: The Rincon Mountains

1. B Manning Camp Trail

After the Quilter Trail, the AZT follows the Manning Camp Trail past Grass Shack toward Manning Camp. The Tanque Verde Ridge Trail is a separate park route up to Cow Head Saddle that the AZT does not use.

2. A Over 6,000 feet in 14 miles

The Rincon climb gains over 6,000 feet in just 14 miles — the single biggest sustained ascent of this stretch, a desert-to-conifer transect that leaves the saguaros far below.

3. C The eastern, Rincon Mountain district

Passage 8 heads for Saguaro National Park's eastern (Rincon Mountain) district, where the big climb begins. The Tucson Mountain district lies west of the city; the other two are not park districts.

4. D Cienega Creek Natural Preserve

Passage 8 traverses the Cienega Creek Natural Preserve and Colossal Cave Mountain Park on its way to Saguaro NP's eastern district before the real climbing begins.

5. C Desert-grassland with golden grasses, mesquite, and saguaro

Passage 8 is classic desert-grassland walking — golden grasses, mesquite, and saguaro — before the trail climbs the Quilter and Manning Camp Trails into higher zones.

6. D A hideout after a train robbery

Colossal Cave was reputedly used as a hideout by a gang that robbed a Southern Pacific passenger train — traditionally dated to 1887, though the exact year is unconfirmed — its branching passages made an ideal place to lie low.

7. A Southern Pacific

The lore holds that the gang robbed a Southern Pacific passenger train, then hid out in Colossal Cave. The other railroads did not figure in this story.

8. B Its cool, branching passages

The cave's cool, branching passages made it an ideal hideout — a maze to disappear into. The other features are not part of the account.

9. C Passage 8

Colossal Cave is on Passage 8, the desert-grassland approach that also traverses Cienega Creek Natural Preserve; Passage 9 continues the climb into the high Rincons.

10. D 1887

Tradition dates the Southern Pacific train robbery behind the Colossal Cave hideout legend to 1887, though the exact year is not confirmed.

11. B About 8,666 feet

Mica Mountain tops out at roughly 8,666 ft in cool mixed-conifer forest. 7,920 ft is Manning Camp, not the summit.

12. A Bypasses the summit, contouring around the peak

True to form, the AZT leaves the summit trail at the junction and contours around Mica Mountain, so bagging the high point is a short off-trail side trip.

13. A The Rincon Mountains

Mica Mountain (~8,666 ft) is the high point of the Rincon Mountains, a Pleistocene relic stranded far above the desert.

14. B Cool mixed-conifer forest

Mica Mountain tops out in cool mixed-conifer forest — a Pleistocene relic high above the desert floor. Cactus and lower woodlands sit far below it on the climb.

15. C By taking a short off-trail side trip from the AZT

At the Mica Mountain junction the AZT leaves the summit trail, so bagging the ~8,666-ft high point is a short off-trail side trip. The official route never crosses the summit.

16. D About 7,920 feet

Manning Camp sits at about 7,920 ft. 8,666 ft is Mica Mountain and 8,482 ft is Rincon Peak — both summits, not the camp.

17. B A historic ranger camp

Manning Camp is a historic ranger camp in the high Rincons, the crown jewel of the high country and the most coveted permitted campsite in the park's backcountry.

18. C A reliable year-round spring and a waterfall

Manning Camp has a reliable year-round spring and a waterfall, making it the single most dependable water source on this stretch of trail.

19. A It's the most coveted designated campsite in the park's backcountry

Manning Camp is the most coveted designated, permit-required campsite in Saguaro NP's backcountry. Dispersed camping is banned parkwide, and permits must be reserved in advance, not walked up.

20. D Reserve a permit through recreation.gov

Manning Camp is a designated, permit-required campsite. Book it through recreation.gov before your hike — there's no legal fallback to dispersed camping in Saguaro NP.

21. B A designated backcountry campground

Grass Shack is a designated backcountry campground in Saguaro National Park, a permitted place to break the big Rincon ascent.

22. A Lower on the climb than Manning Camp

Grass Shack sits lower on the Rincon climb than Manning Camp, letting hikers break the big ascent partway up.

23. D A seasonal water source

Grass Shack offers a seasonal water source — unlike Manning Camp's reliable year-round spring, it cannot always be counted on.

24. C It lets you break the big climb partway up

Positioned partway up the climb, Grass Shack gives a legal, permitted place to split the 6,000-foot ascent into more manageable days.

25. B Reserve it through recreation.gov

Grass Shack requires a recreation.gov reservation, booked before the hike. Dispersed camping is strictly prohibited in Saguaro NP, so there's no legal fallback.

Lesson 3: Redington Pass

1. B A low saddle connecting the Rincon and Santa Catalina ranges

Redington Pass is a low-elevation saddle east of Tucson that separates and connects the Rincon and Santa Catalina ranges — the hot, dry AZT connector between two sky islands.

2. A 13.2 miles

Passage 10 covers 13.2 miles between Redington Road and the Gordon Hirabayashi Campground.

3. C Gordon Hirabayashi Campground

The passage bridges Redington Road and the Gordon Hirabayashi Campground. Molino Basin lies along the route but is not the terminus.

4. D The Rincon and Santa Catalina Mountains

Redington Pass is the saddle between the Rincon and Santa Catalina Mountains east of Tucson.

5. D It is a high, forested alpine crossing

Redington Pass is a low, hot, exposed saddle with little shade — not a high forested alpine crossing. The other statements all describe it accurately.

6. A Molino Basin

7. B The San Pedro River Valley to the east

The high point above Molino Basin opens panoramic views of the San Pedro River Valley to the east before the trail drops into the Catalina front country.

8. C Low rolling grasslands of golden bunchgrasses

The passage starts in low rolling grasslands of golden bunchgrasses, granite boulders, and thistle — open country with almost no shade.

9. B Most of the route is shaded ponderosa pine forest

The route is low, open grassland with almost no shade — not shaded ponderosa forest. It begins in bunchgrasses, switchbacks up to the Molino Basin saddle, then enters the Catalina front country.

10. D The Catalina front country

Past the saddle above Molino Basin the trail leaves the connector and enters the Catalina front country.

11. A Molino Basin Campground

Compare: Gordon Hirabayashi Campground — The Passage 10/11 boundary, sitting at about 4,700 feet.

12. C By the end of April

Molino Basin Campground typically closes for the summer by the end of April, when its water is shut off.

13. C It is shut off

The campground's water is shut off when it closes for the summer, so hikers can't count on it in the hot months.

14. A Molino Basin's water is off in the hot months

Because Molino Basin Campground closes and its water is shut off by late April, a water source the map implies is unavailable — lengthening the dry carry.

15. B Carry more water than feels necessary

With unreliable water and extreme heat, carry more water than feels necessary and hike the low stretches in the cool hours.

16. D High-altitude Townsend's Solitaires

17. A Juniper berries

Townsend's Solitaires drop to the pass in winter to feast on juniper berries.

18. B A short elevational migration

They make a short elevational migration — dropping a few thousand feet from the high country rather than flying south, a sky-island version of migration.

19. D Drop a few thousand feet in elevation

Instead of a long southward migration, these high-altitude birds simply drop a few thousand feet down to the pass.

20. C They fly far south to the tropics for the winter

Townsend's Solitaires do NOT fly south. They make a short elevational migration, dropping a few thousand feet from the high country to the pass in winter to feed on juniper berries.

Lesson 4: The Santa Catalina Mountains

1. B Gordon Hirabayashi Campground

Compare: Molino Basin Campground — A Forest Service campground on the Catalina Highway, but not Passage 11's own start. Gabe Zimmerman Trailhead — The southern gateway onto this whole segment, at the start of Passage 8.

2. A Eocene-aged granite

The Wilderness of Rocks is weathered, Eocene-aged granite carved into hoodoos and balanced boulders — not a sedimentary or volcanic landscape.

3. D Hoodoos, balanced boulders, and flat stone sheets

The Wilderness of Rocks is granite eroded into bizarre hoodoos, balanced boulders, and broad flat sheets of stone — one of the AZT's most distinctive landscapes.

4. C One of the most distinctive landscapes on the entire Arizona Trail

The Wilderness of Rocks ranks as one of the most distinctive landscapes on the entire Arizona Trail. It is a granite hoodoo field, not the trail's high point or a slot canyon.

5. D It descends to cross the San Pedro River

Passage 11 climbs from the Catalina front country through the Wilderness of Rocks to the high forest; it does not descend to the San Pedro River, which lies well east of this range.

6. A A steep saddle and the hardest single climb

Romero Pass is a steep saddle reached by the hardest single climb of the passage — the gateway to the upper pine forests. The other options describe Summerhaven, Hutch's Pool, and the Wilderness of Rocks.

7. C About a vertical mile

Reaching Romero Pass means gaining roughly a vertical mile up from the Sabino Canyon / Hutch's Pool area — the hardest single effort of the crossing.

8. B Pusch Ridge Wilderness Bypass

Because the northern end is steep, narrow, and rocky, equestrians are strongly advised to use the Pusch Ridge Wilderness Bypass.

9. A The Sabino Canyon / Hutch's Pool area

The climb gains roughly a vertical mile up from the Sabino Canyon / Hutch's Pool area, the base of the big ascent.

10. C It is wide and gently graded

The northern end is described as steep, narrow, and rocky with loose footing — the opposite of wide and gently graded.

11. B Tohono O'odham

12. D 9,157 ft

Mount Lemmon tops out at 9,157 feet. Summerhaven sits near 7,800 ft; the others are distractors.

13. C No, the trail stays in the forest below it

The AZT stays in the forest below the 9,157-ft summit; reaching the true high point needs a side trip of about 6.8 miles round-trip.

14. D Botanist Sara Plummer Lemmon

Despite the common error, the peak honors botanist Sara Plummer Lemmon, who summited it in the early 1880s — not the citrus fruit.

15. B About 6.8 miles round-trip

The AZT stays in the forest below the 9,157-ft summit; tagging the true high point takes a side trip of roughly 6.8 miles round-trip.

16. A A deep perennial pool fed by Sabino Creek

Hutch's Pool is a deep, perennial swimming hole fed by Sabino Creek. The other options describe Romero Pass, Summerhaven, and the Mount Lemmon Prison Camp.

17. B About 3,800 ft

Hutch's Pool lies around 3,800 ft, at the base of the vertical-mile climb to Romero Pass.

18. A The last sure water before the Romero Pass climb

Hutch's Pool is the last sure water before the vertical-mile ascent to Romero Pass. Resupply is at Summerhaven, not here.

19. D Desert bighorn sheep

Pusch Ridge Wilderness holds a fragile remnant population of desert bighorn sheep, which the passage skirts.

20. C To protect fragile desert bighorn sheep habitat

The restrictions protect the fragile foothold of the desert bighorn sheep — a reminder that this front country is sensitive habitat.

Lesson 5: Oracle Ridge

1. A Marshall Gulch Trailhead

Compare: Wilderness of Rocks — A high area of weathered, Eocene-aged granite that has eroded into bizarre hoodoos, balanced boulders, and broad flat sheets of stone. The AZT threads through this surreal granite landscape near the top of the Catalina climb.

2. B 17.8 miles

Passage 12 drops 17.8 miles from Marshall Gulch Trailhead to American Flag Ranch near Oracle.

3. D Red Ridge and Oracle Ridge

The trail follows Red Ridge and then Oracle Ridge down to American Flag Ranch.

4. C American Flag Ranch

The descent ends at American Flag Ranch, the northern trailhead where the AZT leaves the ridge for the road to Oracle.

5. A Shaded, gentle switchbacks through dense forest

The ridge is exposed, loose, and rocky with little shade — not a shaded, gentle forest trail. The heat makes it harder than the elevation numbers suggest.

6. D The San Pedro River Valley and the Galiuro Mountains

To the east the ridge overlooks the San Pedro River Valley and the Galiuro Mountains, a long vantage over basin-and-range country.

7. B The Galiuro Mountains

The Galiuro Mountains rise east of the ridge, across the San Pedro River Valley.

8. C The San Pedro River Valley

The ridge looks east over the San Pedro River Valley toward the Galiuro Mountains.

9. D East

The unobstructed views look east over the San Pedro River Valley and the Galiuro Mountains.

10. B Its exposure, with little shade

The same exposure that leaves the ridge shadeless and hot also gives it long, unobstructed views.

11. A Post office

The ranch's building is the oldest standing territorial-era post office in Arizona.

12. C At the northern end, the trailhead near Oracle

American Flag Ranch anchors the northern trailhead where the AZT leaves the ridge for the road toward Oracle.

13. C Leaves Oracle Ridge for the road toward Oracle

At American Flag Ranch the trail leaves the ridge and heads down the road toward the town of Oracle.

14. A American Flag Ranch

American Flag Ranch — not High Jinks — is the one with the oldest standing territorial-era post office building.

15. D It was owned by Buffalo Bill Cody for his mining ventures

It was High Jinks Ranch, not American Flag Ranch, that tied to Buffalo Bill Cody's mining interests.

16. B Buffalo Bill Cody

Buffalo Bill Cody held an interest in High Jinks Ranch and nearby mines late in his life.

17. C Mining

Cody had mining interests near Oracle, chasing gold in these hills — the reason his name still marks the map.

18. B Late in his life

The famous showman chased gold in these hills late in life, tying High Jinks Ranch to Wild West folklore.

19. D Gold

Buffalo Bill Cody chased gold in these hills late in life, linking the trail to Wild West folklore.

20. A It holds Arizona's oldest standing territorial-era post office

The oldest territorial-era post office belongs to American Flag Ranch, not High Jinks Ranch.

Lesson 6: Water Sources & Carries

1. C Cienega Creek

2. D Manning Camp

Manning Camp (about 7,920 ft) is a spring-fed, year-round source in the high Rincons and the anchor for planning carries. The others are reliable too, but Manning is described as the single most reliable.

3. B Hutch's Pool

Hutch's Pool, a perennial pool fed by Sabino Creek, is the last dependable water at the foot of the climb to Romero Pass. Manning and Colossal Cave are reliable but elsewhere; Italian Spring is only seasonal.

4. A Colossal Cave Mountain Park

Colossal Cave Mountain Park usually has water at El Bosquecito and La Selvilla (a park fee applies) — a good top-off before entering Saguaro National Park.

5. D Lemmon Creek

Lemmon Creek flows only seasonally and can freeze in winter, so it cannot be counted on. Manning, Hutch's, and Colossal Cave are the dependable sources.

6. B Redington Pass

The longest dry carry crosses Redington Pass, roughly from Caliente Creek to Sycamore Canyon and Hutch's Pool. Romero Pass and Oracle Ridge are other features, not the carry.

7. C Molino Basin

Molino Basin's spigots are off all summer, so neither connector camp can be relied on — the carry ends only at the perennial Catalina pool.

8. A A seasonal source of variable reliability

Italian Spring is seasonal and variable — verify it in the water report rather than relying on it. Town water describes Summerhaven; the perennial pool is Hutch's.

9. D Lemmon Creek

Lemmon Creek (Passage 11) flows seasonally and can freeze solid in winter. The others are seasonal, but Lemmon is the one singled out for freezing.

10. A Hutch's Pool

Because the connector camps have no usable water, the carry runs all the way to the perennial Catalina pool at Hutch's Pool. Molino Basin is shut off; Italian Spring is only seasonal.

11. B High Jinks Ranch

Historic High Jinks Ranch offers reliable water low on the passage. Molino Basin and Gordon Hirabayashi lack summer water, and Italian Spring is only seasonal.

12. C Oracle Ridge

High Jinks Ranch is on Oracle Ridge, near the end of the hot descent toward Oracle. The northern Rincon descent is where Italian Spring sits.

13. C Oracle

High Jinks Ranch is a last fill near the end of the descent toward American Flag Ranch and Oracle. Summerhaven is the earlier stop high in the Catalinas.

14. D It is a seasonal source of variable reliability

High Jinks Ranch is a reliable source — 'seasonal and variable' describes Italian Spring, not High Jinks. The other three statements are all true.

15. B High Jinks Ranch

Below Summerhaven, High Jinks Ranch is the reliable last fill near the end of the hot Oracle Ridge descent. The others lie elsewhere on the stretch.

Lesson 7: Elevation, Mileage & Stats

1. D 24.3 miles

Passage 9 runs 24.3 miles, the longest of the five. 18.7 is Passage 11, 17.8 is Passage 12, and 13.9 is Passage 8.

2. C 13.9 miles

Passage 8 is 13.9 miles. Don't confuse it with Passage 10 at 13.2 miles; Passage 12 is 17.8 and Passage 9 is 24.3.

3. B 18.7 miles

Passage 11 is 18.7 miles. Passage 8 is 13.9, Passage 9 is 24.3, and Passage 12 is 17.8.

4. A 17.8 miles

Passage 12 is 17.8 miles of long, loose, exposed descent. Passage 10 is 13.2, Passage 11 is 18.7, and Passage 9 is 24.3.

5. B 87.9 miles

The five passages (13.9 + 24.3 + 13.2 + 18.7 + 17.8) sum to 87.9 miles, a compact but demanding total.

6. C Passage 9 (Rincon Mountains)

Passage 9 runs 24.3 miles — the longest of the five — and also the highest, since it contains the full desert-to-conifer Rincon climb. The five passages total 87.9 miles.

7. D 24.3 miles

Passage 9, the longest, is 24.3 miles. The next longest is Passage 11 at 18.7 miles.

8. A Passage 9 (Rincon Mountains)

Only Passage 9, at 24.3 miles, exceeds Passage 11's 18.7. Passages 8, 10, and 12 are all shorter.

9. D highest

Passage 9 is both longest and highest, no coincidence, since it contains the full desert-to-conifer Rincon climb.

10. B It contains the full desert-to-conifer Rincon climb

Passage 9 holds the entire desert-floor-to-conifer Rincon ascent, over 6,000 feet of gain, making it both longest and highest.

11. A About 3,100 ft

Passage 9 dips as low as 3,100 ft in the desert before its huge climb. 3,640 is Passage 11's low, 4,300 is Passage 12's low.

12. C About 8,000 ft

Passage 12 begins near 8,000 ft at Summerhaven before plunging to about 4,300 ft near Oracle.

13. A About 4,800 ft

Passage 10 stays low and hot, ranging roughly 3,500 to 4,800 ft, so its high point is about 4,800 ft.

14. B About 3,600 ft

Passage 8 tops out around 3,600 ft, sitting low in the desert. 3,100 is Passage 9's low and 8,000 is Passage 12's high.

15. D About 3,640 ft

Passage 11 bottoms out around 3,640 ft where it drops into the West Fork of Sabino Canyon before climbing to Romero Pass.

16. C 9,157 ft

Mount Lemmon, the Catalina high point, reaches about 9,157 ft, and the AZT stays below it. Mica Mountain (the Rincon summit) is 8,666 ft and Manning Camp sits near 7,920 ft — the trail's high points stay under the named peaks.

17. B Mount Lemmon

Mount Lemmon (9,157 ft) is the highest named summit within the Rincon-Catalina section; the AZT stays below it. Mount Wrightson (9,453 ft) is taller but lies in the Santa Rita Mountains, outside this stretch. Mica Mountain (8,666 ft) and Rincon Peak (8,482 ft) are lower Rincon summits.

18. D 8,666 ft

Mica Mountain reaches 8,666 ft, and the AZT stays below it. 9,157 ft is Mount Lemmon and 7,920 ft is Manning Camp.

19. C Mica Mountain and Mount Lemmon

The trail bypasses Mica Mountain (8,666 ft) and stays under Mount Lemmon (9,157 ft); those peaks are landmarks beside the route, not points it reaches.

20. A below

The trail's high points stay below the named summits, so peaks like Mica Mountain and Mount Lemmon are landmarks the route never actually tops.

21. D Passage 11

Passage 11 is the Santa Catalina Mountains passage. Passage 8 is Rincon Valley, 9 is Rincon Mountains, and 12 is Oracle Ridge.

22. A Redington Pass

Passage 10 is Redington Pass, short but brutal in the heat. Oracle Ridge is Passage 12 and Rincon Valley is Passage 8.

23. C Rincon Valley

Passage 8 is Rincon Valley. The Rincon Mountains are Passage 9, Redington Pass is Passage 10, and Oracle Ridge is Passage 12.

24. B Passage 12

Oracle Ridge is Passage 12, a long, loose, exposed descent toward Oracle. Passage 9 is the Rincon Mountains.

25. C Passage 11 is Oracle Ridge

Passage 11 is the Santa Catalina Mountains, not Oracle Ridge; Oracle Ridge is Passage 12. The other three pairings are correct.

Lesson 8: Trailheads & Access

1. A Gabe Zimmerman Trailhead

The Gabe Zimmerman Trailhead at Davidson Canyon is the southern gateway to Passage 8; the others are mid-section or northern access points.

2. D Exit 279 (Wentworth Road/Colossal Cave Road)

Take I-10 to Exit 279 (Wentworth Road/Colossal Cave Road), turn east 0.2 mile to the Frontage Road, then south on the Frontage Road about 5.2 miles to the parking area.

3. C About a 3-mile hike east on the Hope Camp Trail

From Loma Alta it takes roughly a 3-mile hike east on the Hope Camp Trail to reach the AZT; there is no direct vehicle access and parking is limited.

4. B Saguaro National Park

Loma Alta, off Old Spanish Trail via Camino Loma Alta, accesses the Saguaro National Park boundary.

5. D The Loma Alta Trailhead offers direct vehicle access to the AZT

Loma Alta has NO direct vehicle access to the AZT — a roughly 3-mile hike on the Hope Camp Trail is required. The other three statements are accurate.

6. B Tanque Verde Road

7. C The Rincons and the Catalinas

The crossing is on the far side of the Rincons, and from Redington Pass the trail climbs into the high Catalinas — so it bridges the Rincons and the Catalinas.

8. A The road becomes rough dirt past about mile 3

Tanque Verde Road becomes dirt (Redington Pass Road) after about mile 3 and is rough and exposed, so high-clearance is wise.

9. B Water

The crossing is flagged as having no water, so hikers must carry enough for this exposed stretch; it is undeveloped, but water is the resource specifically noted as absent.

10. A As a hitch point into Tucson

The remote, exposed crossing is often used as a hitch point into Tucson; it has no water and no developed trailhead facilities. Marshall Gulch, not Redington, is the 11/12 boundary.

11. C American Flag Ranch Trailhead

The ranch access road is American Flag Ranch Road. Compare: Gabe Zimmerman Trailhead — The southern gateway onto this whole segment, at the start of Passage 8.

12. D Marshall Gulch Trailhead

Marshall Gulch, at the end of the road about 1.5 miles south of Summerhaven, is the Passage 11/12 boundary. Gordon Hirabayashi is the 10/11 boundary.

13. C Summerhaven

Marshall Gulch is at the end of the road about 1.5 miles south of Summerhaven, with paved access and parking.

14. A Dead-end parking near the historic ranch

From Oracle, American Flag Ranch Road ends at dead-end parking near the historic ranch — the northern access for the Rincon-Catalina section.

15. B American Avenue

From Oracle you take American Avenue to Mount Lemmon Road about 4 miles, then turn onto American Flag Ranch Road to the parking area.

Lesson 9: Campsites & Permits

1. A El Bosquecito Campground

Compare: Molino Basin Campground — a Forest Service site in the connector, with seasonal water. Gordon Hirabayashi Campground — at the Passage 10/11 boundary, with no water. Grass Shack Campground — a Saguaro National Park backcountry site with seasonal water, booked on recreation.gov.

2. D La Selvilla Campground

Compare: Molino Basin Campground — a Forest Service site in the connector, with seasonal water. Grass Shack — a Saguaro National Park backcountry site requiring a recreation.gov permit. Manning Camp — the premier high-country site, also booked on recreation.gov.

3. C Colossal Cave Mountain Park

Both El Bosquecito and La Selvilla are established campgrounds in Colossal Cave Mountain Park (Passage 8), each with reliable park water and a fee. Saguaro NP has only backcountry sites; the others aren't where these campgrounds sit.

4. B April

Molino Basin is a Forest Service site with only seasonal water; its spigots are turned off and it closes for the summer by the end of April, so it can't be relied on for water in the hot months.

5. A Hutch's Pool

Hutch's Pool is a dispersed campsite beside a perennial pool, not an established campground. El Bosquecito, La Selvilla, and Molino Basin are all established, developed campgrounds.

6. C Through recreation.gov

Saguaro NP strictly enforces backcountry permits and reservations, all booked through recreation.gov before the hike. Pima County covers Cienega Creek, not Saguaro's sites.

7. B Manning Camp and Grass Shack

Manning Camp and Grass Shack are the park's designated sites, both requiring recreation.gov permits. The others sit outside Saguaro NP on county, Forest Service, or dispersed land.

8. D There is no legal dispersed camping in the park

Saguaro NP allows no legal dispersed camping, so the only way to camp overnight in the Rincons is a reserved permit for a designated site. The other statements aren't the park's rule.

9. C Dispersed camping is allowed once you get a permit

There is NO legal dispersed camping in Saguaro NP, permit or not — you must use a designated site. The other three statements are all accurate.

10. A Reserve it early, well before the hike

Manning Camp is the most coveted recreation.gov reservation on the stretch, so it should be booked early — well ahead of the hike. It can't be claimed on arrival, and it's a Saguaro NP site, not a Pima County one.

11. B Pima County

Cienega Creek is a Pima County natural preserve, so stepping off the AZT there — or camping — requires a Pima County permit. Saguaro NP's backcountry sites are instead reserved through recreation.gov.

12. D Pay an entry fee and stay in designated campgrounds

Colossal Cave charges an entry fee and requires hikers who stop to stay in its designated campgrounds — it's a county park, not free public land. recreation.gov and Pima County govern other areas.

13. C When stepping off the designated AZT route

Through-hikers staying on the AZT are fine; the Pima County permit is only needed if you step off the designated route to explore the wider preserve or camp there.

14. A Colossal Cave charges a camping fee; Cienega Creek requires a permit to step off the AZT

Colossal Cave Mountain Park has a camping fee, and hikers who stop there must stay in its designated campgrounds (La Selvilla or El Bosquecito). The Cienega Creek Natural Preserve needs a Pima County permit only if you step off the designated AZT route. The two rules belong to different places.

15. B Stopping to camp or use water at Colossal Cave

Colossal Cave Mountain Park charges an entry fee to stop, camp, or use its water. Redington Road dispersed camping needs no permit, Gordon Hirabayashi needs no special trail permit, and staying on the AZT through Cienega Creek is fine.

Lesson 10: Navigation & Junctions

1. A Saguaro National Park

Compare: Santa Catalina Mountains — This mountain range is situated north of Tucson, Arizona. Cienega Creek Natural Preserve — This preserve is located southeast of Tucson, Arizona.

2. B Manning Camp Trail

Compare: Tanque Verde Ridge Trail — a separate park route that runs up to Cow Head Saddle; the AZT does not use it. The Italian Spring Trail is the AZT's descent on the far side.

3. D Italian Spring Trail

Compare: Quilter Trail — The named trail the AZT picks up to leave the desert-valley approach and enter the park's trail system.

4. C The Quilter Trail junction

Northbound, the AZT joins the Quilter Trail first, then the Manning Camp Trail, then passes the Mica Mountain junction before the Italian Spring Trail descent.

5. C Saguaro National Park boundary

The AZT joins the Quilter Trail at the Saguaro National Park boundary to begin its Rincon Mountain District route. The Cienega Creek Natural Preserve lies behind it on Passage 8.

6. B Manning Camp Trail

After the Quilter Trail, the AZT follows the Manning Camp Trail past Grass Shack. The Tanque Verde Ridge Trail is a separate park route up to Cow Head Saddle; the Italian Spring Trail is the far-side descent.

7. A Mica Mountain junction

At the Mica Mountain junction the AZT leaves the summit trail and contours through the forest; peak-baggers peel off there for a short out-and-back to the roughly 8,666-ft summit.

8. D Italian Spring Trail

The AZT joins the Italian Spring Trail on the northern Rincon descent toward Redington Road.

9. B Sabino Canyon

10. A Hutch's Pool

11. C Romero Pass

12. D Wilderness of Rocks Trail

13. A Cow Head Saddle

Cow Head Saddle is in the Rincons, at the top of the Tanque Verde Ridge Trail, off the AZT. The West Fork, Romero Pass, and Wilderness of Rocks all belong to the Catalina crossing.

14. D First, before Hutch's Pool

Northbound, the AZT joins the West Fork in Sabino Canyon first, passes the Hutch's Pool spur, climbs to Romero Pass, then joins the Wilderness of Rocks Trail.

15. B It is a notoriously inconspicuous, unsigned spur

The Hutch's Pool side trail is notoriously inconspicuous and unsigned, so hikers often walk right past it.

16. C Romero Pass

Romero Pass is the pivot point where the AZT turns toward the high pine forests after the vertical-mile climb.

17. B Wilderness of Rocks Trail

The Wilderness of Rocks Trail winds among the granite hoodoos below Mount Lemmon.

18. D Red Ridge

19. A American Flag Ranch Road

Compare: Redington Road — The dirt road the AZT leaves via singletrack back on Passage 10. Tanque Verde Road — The Tucson road that becomes Redington Pass Road near the AZT crossing.

20. C Marshall Saddle

Marshall Saddle is where the AZT departs to start toward the Oracle Ridge descent. Romero Pass is the earlier Catalina pivot into the high forest; Cow Head Saddle and Redington Pass are on the Rincon side.

21. B Summerhaven

Reroutes near Summerhaven have at times sent the route along village roads, a brief signed road walk with food and water available. Oracle is the far endpoint; Manning Camp and Redington are elsewhere.

22. D Romero Pass

Romero Pass comes earlier, at the top of the climb from Sabino Canyon. After Marshall Saddle the route passes through Summerhaven, turns onto the Oracle Ridge Trail and ends on American Flag Ranch Road.

23. C Quilter Trail

At the park boundary the AZT joins the Quilter Trail onto the park's trail system. The Tanque Verde Ridge Trail is a separate park route the AZT does not use; Italian Spring is the far-side descent; Oracle Ridge is in the Catalinas.

24. A West Fork of Sabino Canyon Trail

The AZT joins the West Fork of Sabino Canyon Trail upstream toward Hutch's Pool. Wilderness of Rocks is higher, near Mount Lemmon; Oracle Ridge is on Passage 12, and the Tanque Verde Ridge Trail is off the AZT in the Rincons.

Lesson 11: Ecology & Life Zones

1. D An isolated mountain range whose forested peaks are surrounded by a sea of lowland desert

A sky island is an isolated range whose forested peaks are marooned in surrounding lowland desert. The isolation and elevation gradient set it apart from a connected or uniform range.

2. B It strands northern and Mexican species far from their main ranges as living refuges

Isolation makes the peaks refuges that strand northern and Mexican species far from their main ranges. Desert species stay low, and the range stays cut off, not connected.

3. A The United States

The higher zones hold plants that occur nowhere else in the United States. The other regions are distractors, not the stated scope of the endemism.

4. C Its isolation and its steep elevation gradient

A sky island's isolation and steep elevation gradient preserve stacked zones and species found nowhere else. The other pairs describe conditions the sky islands lack.

5. C They are lowland deserts surrounded by rings of forest

The reality is inverted: sky islands are forested peaks marooned in desert, not deserts surrounded by forest. The other three statements are true.

6. B Six

The route traverses six distinct biotic communities stacked by elevation, from desert scrub up to mixed-conifer forest.

7. D Northern Mexico and Canada

Ascending through the six zones is like driving from northern Mexico to Canada — a continent's worth of ecosystems in one climb.

8. A Desert grassland, Madrean oak woodland, mixed-conifer forest

Ascending order is desert grassland, then Madrean oak woodland, then mixed-conifer forest at the top. The other sequences scramble that elevation order.

9. A Sonoran Desert scrub

Sonoran Desert scrub occupies the lowest elevations; mixed-conifer forest caps the highest peaks, with the woodlands in between.

10. B Alpine tundra

The six zones top out at mixed-conifer forest; there is no alpine tundra here. Desert grassland, pine-oak woodland, and Madrean oak woodland are all genuine zones.

11. D Sonoran Desert

12. C Saguaro

The saguaro is the tree-like cactus of the scrub. Ocotillo and soapweed yucca belong to desert grassland, and alligator juniper to pine-oak woodland.

13. C Mesquite and palo verde

Mesquite and palo verde are the scrub's desert legumes. The other pairs are the signature plants of the pine-oak, mixed-conifer, and oak-woodland zones.

14. A Small leaves suited to drought and heat

Microphyllous means small-leaved — an adaptation to drought and heat. Broad, needle, and leafless forms are not what the term describes here.

15. D Quaking aspen and Douglas fir stands

Quaking aspen and Douglas fir belong to the highest mixed-conifer forest, not the desert scrub. The other three are the scrub's defining plants.

Lesson 12: Flora & Fauna

1. A About 200 years

Saguaros can live 150 to 200 years, so 200 is the upper bound. A many-armed giant is genuinely ancient.

2. B 40 to 60 feet

Saguaros grow up to roughly 40 to 60 feet tall and can weigh well over a ton when fully hydrated.

3. C Its arms appear in its first year of growth

Arms typically don't appear until the plant is 50 to 100 years old (accounts vary), not in its first year. The other statements are all accurate.

4. D Gila woodpeckers and gilded flickers

Gila woodpeckers and gilded flickers excavate the cavities in saguaros; elf owls and purple martins move in only after the woodpeckers vacate. Mexican spotted owls are a different Southwestern species altogether.

5. A Elf owls

Tiny elf owls move into cavities that Gila woodpeckers and gilded flickers excavate and abandon, a key reason the saguaro is a keystone species. The woodpeckers and flickers dig fresh holes rather than reusing them.

6. B Clusters of dry, thorny sticks

Ocotillo look like dry, thorny sticks most of the year, then leaf out and throw up red-orange flower spikes after spring rains.

7. D Deeply checkered bark like alligator hide

Alligator juniper is unmistakable for its deeply checkered bark that looks exactly like alligator hide. Red-orange spikes belong to ocotillo.

8. C Hummingbirds

After spring rains ocotillo produces brilliant red-orange flower spikes, a vital nectar source for migrating hummingbirds.

9. A It keeps broad green leaves all year

Ocotillo drops and regrows leaves with each pulse of moisture; it does NOT stay leafy all year. The other statements are accurate.

10. B Alligator juniper

The deeply checkered, alligator-hide bark identifies the alligator juniper, a long-lived tree of the oak and pine-oak zones.

11. C A large wasp

Despite the name, the tarantula hawk is a large wasp — with one of the most painful stings of any insect. It parasitizes tarantulas, paralyzing a spider and dragging it to a burrow so its larva can consume it alive.

12. D 3 to 4 years

Palo verde beetles spend 3 to 4 years underground feeding on tree roots before emerging during the summer monsoon as huge flying beetles.

13. D Harmless to people

The 3-plus-inch palo verde beetle is alarming but harmless, and even beneficial for aerating the soil.

14. B One of the most painful stings of any insect

The tarantula hawk is a large wasp with one of the most painful stings of any insect, though it is best simply given a wide berth.

15. C Paralyzes it so its larva can eat it alive

The tarantula hawk parasitizes tarantulas: it paralyzes a spider, drags it to a burrow, and lays an egg so the larva can consume it alive.

16. A Gives birth to live young

Yarrow's spiny lizard is viviparous (live-bearing), an adaptation that helps it survive cool high-elevation nights where eggs might not incubate.

17. D Sprint on its hind legs across boulders

The collared lizard can sprint bipedally, rearing onto its hind legs to run across boulder-strewn slopes. Long burrowing describes the Gila monster.

18. C About 90 percent

The Gila monster spends up to 90 percent of its life underground, emerging mainly in late spring to raid eggs and nestlings.

19. A Cool mountain nights that could stop eggs incubating

Viviparity lets Yarrow's spiny lizard reproduce despite cool high pine-oak nights where laid eggs might not incubate.

20. B Gila monster — sprints bipedally on its hind legs

Bipedal sprinting is the collared lizard's trait, not the Gila monster's. The Gila monster is a venomous, mostly-underground lizard.

21. D Mexican spotted owl

The threatened Mexican spotted owl roosts in cool, steep-walled conifer ravines; a sighting signals healthy old-growth canyon habitat. Elf owls, Gila woodpeckers, and gilded flickers are lower-desert saguaro birds.

22. B Coatimundi

Coatimundi are social, long-tailed mammals that forage in bands through the leaf litter, ringed tails held high.

23. C Raccoon

Coatimundi are social, long-tailed members of the raccoon family.

24. A Gila monster

The Gila monster is one of the few venomous lizards on Earth. The collared and Yarrow's lizards are not venomous, and the coatimundi is a mammal.

25. D Yarrow's spiny lizard

Yarrow's spiny lizard is the live-bearing (viviparous) species, adapted to cool high pine-oak nights. The Gila monster, Sonoran spotted whiptail, and collared lizard are all egg-laying reptiles.

Lesson 13: Hazards & Safety

1. D Extreme heat

Heat is the deadliest hazard on the low passages, where temperatures routinely top 100°F with little shade or water — hike the cool hours and avoid the desert in summer.

2. B It is harmless — it doesn't sting, though its grubs feed underground on tree roots

The giant palo verde beetle is a myth-buster: despite its size and clumsy monsoon flight, it does not sting and is harmless to people — even though its grubs do feed on tree roots underground.

3. C 2003

The Aspen Fire burned in 2003, and its scars still mean lost shade, downed timber, and altered navigation on the mountain.

4. A Mount Lemmon

The Aspen Fire burned much of Mount Lemmon and parts of Summerhaven — a vivid lesson in how fire reshapes a sky island.

5. A 6,000 feet

Snow and ice can linger above about 6,000 feet into spring near Mica Mountain and Mount Lemmon — carry traction and check conditions.

6. D Run in a straight line to an enclosed shelter

Run in a straight line to a building or vehicle without flailing. Don't jump in water — the bees will wait for you to surface.

7. B Make yourself big and back away slowly

Never run from a lion — running triggers a chase. Make yourself big and back away slowly instead.

8. C Use the bear boxes provided at camps

Store all food and scented items properly using the bear boxes at camps, and keep a clean camp.

9. C Step on top of the log rather than blindly over it

Step on top of logs rather than over them blindly — a snake could be resting on the far side. Watch hand and foot placement and give snakes room to retreat.

10. D Mohave and tiger rattlesnake

The two named are the highly venomous Mohave and the tiger rattlesnake, common across lower and middle elevations.

11. A Africanized bees

Africanized ('killer') bees are established region-wide and defend their hives aggressively — give any hive a wide berth.

12. B Black bears and mountain lions

Black bears and mountain lions inhabit the mid-to-high elevations of both the Rincons and Catalinas.

13. C Rattlesnakes

Only rattlesnakes — including the Mohave and tiger rattlesnake — are named as common at lower and middle elevations on rocky trails.

14. A Giant palo verde beetle

The giant palo verde beetle is a myth-buster: despite its 3+ inch size it doesn't sting and is harmless, while bears, bees, and rattlesnakes are real hazards.

15. B Mountain lion

The 'never run, make yourself big, back away slowly' advice is specifically for the mountain lion; the smaller coyote, bobcat, and fox aren't the target of that guidance.

16. D Mountain lion

Never run from a mountain lion — make yourself big and back away slowly.

17. C Black bears

Black bears are the reason for storing food and scented items properly, including using bear boxes at camp.

18. D Africanized bees

Africanized bees are established region-wide and defend their hives aggressively.

19. B Rattlesnakes

Rattlesnakes, including the Mohave and tiger rattlesnake, are common at lower and middle elevations.

Lesson 14: Water Sources Up Close

1. B Chimenea Creek

Chimenea Creek is the first seasonal water after entering Saguaro NP in Passage 9 and drains the largest watershed in the Rincons. Rincon Creek and Cienega Creek sit lower in Passage 8.

2. A Rincon Creek

Rincon Creek, near Passage 8's northern end at the park boundary, carries seasonal flow and is the last reliable water before the climb. Chimenea, Grass Shack, and Italian Spring lie higher in Passage 9.

3. C About 5,300 ft

Grass Shack sits at about 5,300 ft along Chimenea Creek. 6,708 ft is Italian Spring and 7,920 ft is Manning Camp, both higher on the climb.

4. D About 6,708 ft

The Italian Spring trail junction is around 6,708 ft, below Manning Camp (7,920 ft) and above Grass Shack (5,300 ft).

5. A Lemmon Creek

Lemmon Creek is a Catalina source near Marshall Saddle in Passage 11. Chimenea Creek, Grass Shack, and Italian Spring are all Rincon sources in Passages 8-9.

6. C Manning Camp

Manning Camp (about 7,920 ft), near the top of the Rincon climb, is generally the single most dependable source on the segment.

7. B About 7,920 ft

Manning Camp sits at about 7,920 ft, the high point among the named Rincon sources. Italian Spring is ~6,708 ft and Grass Shack ~5,300 ft.

8. D About 3 to 4 miles

The Manning-to-Italian-Spring leg runs only about 3 to 4 miles, a short and useful figure when rationing water on the descent.

9. A About 1,200 feet

The leg is a gentle descent of roughly 1,200 feet, from about 7,920 ft at Manning down to about 6,708 ft at Italian Spring.

10. B Italian Spring

Italian Spring (about 6,708 ft) lies 3 to 4 miles and roughly 1,200 ft below Manning Camp on Mica Mountain's north side. Grass Shack and Chimenea Creek are below Manning on the southern climb; Caliente Creek is on Passage 10.

11. C Caliente Creek

Caliente Creek, crossed early in Passage 10, runs only seasonally and the ATA flags the section as 'not reliable.' Lemmon Creek and Sabino Canyon are Passage 11 sources.

12. D Lemmon Creek

Lemmon Creek flows seasonally high near Marshall Saddle. Hutch's Pool is the dependable low source, and High Jinks Ranch is a Passage 12 source on Oracle Ridge.

13. D High Jinks Ranch

The ATA lists only Summerhaven at the top and High Jinks Ranch mid-passage for the shadeless Passage 12 descent to Oracle. Romero Pass has no spring on the main route.

14. C Grass Shack

Grass Shack is a Rincon source on Passage 9. Caliente Creek (P10), Lemmon Creek (P11), and High Jinks Ranch (P12) all lie in the drier Catalina/Redington stretch.

15. A Shut off when the camp closes

Molino Basin Campground's water is shut off when the campground closes each spring, usually by the end of April. Gordon Hirabayashi Campground a little farther on has no water at all.

Lesson 15: Landmarks of the Sky Islands

1. A Romero Pass and Marshall Gulch

The sub-alpine granite Wilderness of Rocks — the crossing's showpiece — is traversed between Romero Pass and Marshall Gulch. The trail can fade among the boulders, so navigate deliberately here.

2. D 3,640 ft

Sabino Canyon's deep, granite-walled corridor bottoms out around 3,640 ft before the long climb to Romero Pass (~6,000 ft). The distractors are Molino Basin (~4,500) and Gordon Hirabayashi (~4,700).

3. B About 8,200 ft

The Passage 11 high point sits around 8,200 ft in the cool conifer zone below Mount Lemmon. 6,000 ft is Romero Pass, 4,700 ft is Gordon Hirabayashi, and 3,640 ft is the Sabino low point.

4. C Pusch Ridge Wilderness

The Wilderness of Rocks is a sub-alpine granite garden in the Pusch Ridge Wilderness. The Bighorn Sheep Management Area borders Romero Pass but is not where these rock formations sit.

5. A A sub-alpine garden of sculpted granite formations

The Wilderness of Rocks is a sub-alpine garden of weathered, sculpted granite. The canyon corridor describes Sabino, the grassland bowl is Molino Basin, and the exposed ridge is Red Ridge.

6. B About 6,000 ft

Romero Pass is a saddle around 6,000 ft. 8,000 ft is Marshall Gulch, 4,500 ft is Molino Basin, and 3,640 ft is the Sabino Canyon low point.

7. C About 8,000 ft

Marshall Gulch is around 8,000 ft, the high-point gateway to the Oracle Ridge descent. 6,000 ft is Romero Pass, 4,700 ft is Gordon Hirabayashi, and 4,500 ft is Molino Basin.

8. D Marshall Gulch

Marshall Gulch marks the Passage 11/12 boundary. Gordon Hirabayashi is the Passage 10/11 boundary, and Romero Pass and Molino Basin are landmarks within the crossing.

9. B Bighorn Sheep Management Area

Romero Pass sits on the eastern edge of the Bighorn Sheep Management Area and ties together several major trails. The Wilderness of Rocks, not the pass, lies in the Pusch Ridge Wilderness.

10. D It is the low point of Passage 11 at about 3,640 ft

The 3,640 ft low point is the West Fork of Sabino Canyon, not Marshall Gulch. Marshall Gulch is a high saddle near 8,000 ft with Lemmon Creek, marking the Passage 11/12 boundary.

11. C Passage 11

The paved Catalina Highway crosses the AZT at the start of Passage 11, just south of Gordon Hirabayashi Campground.

12. A About 6,000 ft

The National Scenic Byway climbs over 6,000 ft from Tucson to Mount Lemmon. 2,300 ft is Passage 10's gain, 8,200 ft is the Passage 11 high point, and 3,640 ft is the Sabino low.

13. B National Scenic Byway

The paved Catalina Highway is a National Scenic Byway that climbs to Mount Lemmon. The other designations do not apply to this road crossing.

14. D Gordon Hirabayashi Campground

Hikers cross the highway just south of Gordon Hirabayashi Campground at the start of Passage 11. Marshall Gulch, Summerhaven, and the Wilderness of Rocks lie higher up the range.

15. A Hitchcock Highway

The Catalina Highway is also known as the Hitchcock Highway. The other names are not used for this National Scenic Byway.

16. C A deep, granite-walled corridor and the low point of Passage 11

The West Fork of Sabino Canyon is a deep, granite-walled corridor and the low point of Passage 11. The other descriptions match the Wilderness of Rocks, Molino Basin, and Red Ridge.

17. D About 4,500 ft

Molino Basin is a high-desert grassland bowl around 4,500 ft. 3,640 ft is the Sabino low, 6,000 ft is Romero Pass, and 8,200 ft is the Passage 11 high point.

18. A West Fork of Sabino Canyon

Hutch's Pool and Sabino Creek are in the West Fork of Sabino Canyon. Molino Basin has Molino Creek, and Marshall Gulch has Lemmon Creek.

19. B A high-desert grassland bowl crossed by the Catalina Highway

Molino Basin is a high-desert grassland bowl crossed by the Catalina Highway. The canyon describes Sabino, the granite garden is the Wilderness of Rocks, and the saddle is Romero Pass.

20. C Passage 10

The AZT drops into Molino Basin at the end of Passage 10's descent. Passage 11 climbs the high Catalina country and Passage 12 descends Oracle Ridge.

21. A Passage 12

'Red Ridge' is the official alternate name for Passage 12, the loose, exposed descent toward Oracle. Passages 10 and 11 cover the lower crossing and the high Catalina country.

22. C About 4,700 ft

Gordon Hirabayashi Campground sits around 4,700 ft and is open year-round but waterless. 4,500 ft is Molino Basin, 6,000 ft is Romero Pass, and 8,200 ft is the Passage 11 high point.

23. B About 2,300 ft

Passage 10 does roughly 2,300 ft of cumulative climbing. 5,000 ft is the Catalina Highway's rise, 4,700 ft is Gordon Hirabayashi's elevation, and 8,200 ft is the Passage 11 high point.

24. D Summerhaven

Red Ridge drops from Summerhaven at the start of Passage 12 before the trail pivots onto Oracle Ridge for the long plunge toward Oracle.

25. C It is waterless

Gordon Hirabayashi Campground is open year-round but waterless, so hikers must plan water elsewhere. The seasonal-closure trait belongs to Molino Basin's campground.

Lesson 16: Permits, Logistics and Closures

1. A Two months ahead

Bookings open two months ahead. Pick your entry date and a designated site (Grass Shack or Manning Camp), pay the $8 per-site, per-night fee, and carry the permit — compliance is strictly enforced.

2. C $8

Saguaro NP charges an $8 per-site, per-night backcountry camping fee, paid when you reserve a designated site on recreation.gov.

3. D recreation.gov

Reservations for Grass Shack and Manning Camp are made on recreation.gov, where you pick your entry date and site and pay the $8 per-night fee.

4. B Grass Shack and Manning Camp

Only two designated sites touch the AZT in the park: Grass Shack (~5,300 ft) and Manning Camp (~7,920 ft). Dispersed camping is banned park-wide.

5. B Two months ahead

Bookings open two months ahead on recreation.gov. Because dispersed camping is banned, hikers reserve a designated site early to plan the big Rincon climb.

6. C Rincon Mountain Wilderness (Passage 9)

Bikes are banned in the Rincon Mountain Wilderness (Passage 9) and the Pusch Ridge Wilderness portion of Passage 11. The Coronado forest passages otherwise allow riding.

7. A Pusch Ridge Wilderness Bypass (Passage 11e)

Cyclists must use the Pusch Ridge Wilderness Bypass, Passage 11e, since bikes are barred from the wilderness portion of the main Passage 11 route.

8. D The trail there is narrow, steep, and rocky

The northern Santa Catalina section of Passage 11 is too narrow, steep, and rocky for stock, so horse parties take the graded Pusch Ridge Bypass (11e) instead.

9. B Detour onto Passage 11e

Bikes are prohibited in the Pusch Ridge Wilderness portion of Passage 11, so cyclists must detour onto the Passage 11e bypass. There is no permit that lets bikes through.

10. C Bikes may ride the Pusch Ridge Wilderness part of Passage 11

Bikes are banned in the Pusch Ridge Wilderness portion of Passage 11, so that claim is false. The others are true: bikes are barred from the Rincon Mountain Wilderness, and stock takes graded 11e because northern Passage 11 is too narrow and rocky.

11. A January 1 to April 30

The Coronado NF order runs January 1 to April 30 each year, protecting lambing desert bighorn. Spring northbound hikers catch the tail end of this window in late March and April.

12. D More than 400 feet

The order bars travel more than 400 feet off system trails in the management area. (200 feet is the separate no-camping-near-water forest rule.)

13. B Year-round

Dogs are banned year-round, not just during lambing season, because even leashed dogs stress the sheep. The seasonal off-trail limit is separate and runs Jan 1 to Apr 30.

14. D Take Passage 11e, the bypass

Because dogs are banned year-round in the management area, dog owners must take the Passage 11e bypass. Leashing does not exempt a dog from the ban.

15. A Dogs are allowed if kept leashed

Dogs are banned year-round regardless of leashing. The other three statements are accurate: the 400-foot off-trail limit runs Jan 1–Apr 30 and the rules protect lambing bighorn.

16. C Northbound in spring, starting early-to-mid March

Most hikers go northbound in spring, starting early-to-mid March, which puts the high country in late March–April for moderate temps and snowmelt water. Southbound in October–November also works but demands sharper water and snow planning.

17. D Summerhaven

Summerhaven is a rare on-trail resupply at the start of Passage 12, with a general store, post office, and food. Oracle lies about 4 miles off-trail at the north end.

18. C About 4 miles

American Flag Ranch Trailhead sits about 4 miles from Oracle via Mount Lemmon Road; Oracle has a small grocery and shuttle access.

19. B It holds packages and carries limited groceries

The Mt. Lemmon General Store in Summerhaven holds packages and carries limited groceries. Finding True North is a Tucson-based shuttle that serves Oracle, not Summerhaven.

20. A Late March and April

Starting early-to-mid March northbound times the high country for late March and April — moderate temps, snowmelt water, and the tail end of the bighorn restrictions.

Lesson 17: History and Culture

1. C About 30 million years ago

Starting about 30 million years ago, a mass of granite rose from miles deep along the Catalina Detachment Fault, doming upward and exposing ancient schists and gneisses — the reason hikers scramble over sculpted granite boulders through Passages 9–11.

2. A Jesuit missionary Eusebio Francisco Kino, for St. Catherine of Alexandria

The Jesuit missionary Eusebio Francisco Kino named the range around 1697 for St. Catherine of Alexandria. Serra and Coronado are the wrong era or order.

3. D Around 1697

Kino named the Catalinas around 1697. The other dates belong to other Southwest events (Coronado's 1540 expedition, later missions, the Mexican Cession).

4. B The Catalina Detachment Fault

The granite rose along the Catalina Detachment Fault, doming upward and exposing ancient schists and gneisses. The others are unrelated or invented faults.

5. C The Catalina–Rincon metamorphic core complex

The ranges form the Catalina–Rincon metamorphic core complex, where deep granite domed up beside ancient schists and gneisses — not a caldera, basin, or coastal batholith.

6. A Frog Mountain

Babad Do'ag translates to 'Frog Mountain,' the Tohono O'odham name for the Santa Catalinas long before the Spanish name.

7. D The Tohono O'odham

The Tohono O'odham called the range Babad Do'ag ('Frog Mountain'). The Apache, Hopi, and Navajo are other Southwest peoples not tied to this name.

8. B The Santa Catalina Mountains

Babad Do'ag names the Santa Catalinas specifically. The Rincons, Santa Ritas, and Superstitions are other Arizona ranges.

9. C It predates the Spanish name by centuries

The O'odham knew the range as Babad Do'ag long before Kino gave it a Spanish name around 1697 — so the indigenous name is far older, not a translation or a later coinage.

10. B It means 'St. Catherine' in the O'odham language

Babad Do'ag means 'Frog Mountain,' not 'St. Catherine' — St. Catherine is the source of the later Spanish name. The other three statements are all accurate.

11. A Gabrielle Giffords

Zimmerman was an aide to Representative Gabrielle Giffords and was killed in the January 8, 2011 Tucson shooting — the first congressional staffer slain in the line of duty.

12. D The curfew and Japanese-American internment orders

In 1942 Hirabayashi defied the wartime curfew and internment orders as unconstitutional; his conviction was overturned in 1987, and the campground was renamed for him in 1999.

13. A The High Jinks gold mine

Cody staked the High Jinks gold mine near Oracle on April 14, 1912, and kept a cabin there until his death in 1917; La Casa del High Jinks stands near the site.

14. B Gordon Hirabayashi Campground

The Forest Service renamed the campground for Gordon Hirabayashi in 1999. The trailhead honors Zimmerman; the ranch and La Casa del High Jinks are frontier-era sites.

15. C American Flag Post Office — Buffalo Bill Cody

The American Flag Post Office (built 1877) is a territorial relic, not tied to Cody. Cody is linked to La Casa del High Jinks; the other two pairings are correct.

Lesson 18: Quick Recall — Key places & terms

1. A They are cool, forested ranges marooned in desert, preserving stacked life zones

Sky islands are isolated, forested mountains stranded in a sea of desert; their height stacks distinct life zones one atop another, which is why these ranges feel so different from the surrounding lowlands.

2. C Mica Mountain

Mica Mountain (~8,666 ft) is the highest point in the Rincons. Rincon Peak (8,482 ft) is a lower Rincon summit, and Mount Lemmon is the Catalinas' high point.

3. B Mount Lemmon

Mount Lemmon (9,157 ft) crowns the Santa Catalinas. Mica Mountain tops the Rincons; Wrightson and Rincon Peak are other summits, not the Catalina high point.

4. D About 8,666 ft

Mica Mountain stands at roughly 8,666 ft. 9,157 ft is Mount Lemmon in the Catalinas; the lower figures are distractors.

5. A They are desert basins that trap cool air between higher ranges

Sky islands are forested ranges marooned in desert that stack life zones by elevation, not desert basins. The trail does bypass both Mica Mountain and Mount Lemmon.

6. D Manning Camp

Manning Camp is the high Rincons' most reliable water and premier designated campsite. Hutch's Pool is a Catalina-side pool; Romero Pass and American Flag Ranch are not camps for this role.

7. B Hutch's Pool

Hutch's Pool is the perennial Sabino Creek pool at the foot of the vertical-mile climb to Romero Pass. Manning Camp and Italian Spring are Rincon sources, and seasonal Lemmon Creek flows high near Marshall Saddle.

8. C A punishing vertical-mile climb

Romero Pass is gained by a punishing vertical-mile climb from Hutch's Pool. The other options understate the effort or describe a descent, not the steep ascent.

9. A Across Redington Pass

The longest dry carry is across Redington Pass, the hot low saddle whose connector camps have no reliable water. Hutch's Pool and Manning Camp are reliable water sources.

10. B The connector camps at Redington Pass have reliable water

The connector camps at Redington Pass have no reliable water, which is why the longest dry carry falls there. Manning Camp and Hutch's Pool are reliable, and the dry-carry statement is true.

11. C Redington Pass

Redington Pass is the hot, dry saddle between the two ranges and site of the longest dry carry. Romero Pass is a high Catalina saddle; Oracle Ridge is a ridge; Manning Camp is a campsite.

12. D Red Ridge

Red Ridge is the exposed, shadeless Passage 12 descent ending at American Flag Ranch. The passes are saddles, and Babad Do'ag is the O'odham name for the whole Catalina range.

13. B The oldest standing territorial post office in Arizona

American Flag Ranch holds the oldest standing territorial post office in Arizona. The other options are plausible-sounding but incorrect landmarks.

14. D Babad Do'ag

Babad Do'ag ('Frog Mountain') is the O'odham name for the Catalinas, older than the Spanish 'Santa Catalina.' Baboquivari and Rincon are other Arizona ranges.

15. A American Flag Ranch Trailhead

Red Ridge ends at American Flag Ranch, the northern trailhead. Passage 12 begins at the Marshall Gulch Trailhead, and the Gabe Zimmerman and Loma Alta trailheads serve the southern passages.

16. C Redington Pass

Redington Pass is the low, hot, dry saddle that separates the Rincon Mountains from the Santa Catalinas.

17. D Redington Pass

The connector camps around Redington Pass have no reliable water, making it the longest dry carry of the whole stretch.

18. A Saguaro National Park

Saguaro National Park protects the Rincons, bans dispersed camping, and requires a recreation.gov permit to overnight. The others are nearby lands with different rules.

19. C A recreation.gov permit

Overnighting in Saguaro National Park requires a recreation.gov permit at a designated site. Dispersed and permit-free camping are not allowed there.

20. B Mica Mountain

Mica Mountain (~8,666 ft) crowns the Rincons, the range Saguaro National Park protects. Mount Lemmon tops the Catalinas; Wrightson and Rincon Peak are other Arizona summits.

21. B Mica Mountain and Mount Lemmon

The two named summits are Mica Mountain (Rincons) and Mount Lemmon (Catalinas). Wrightson, Rincon Peak, Baboquivari, and Graham are other Arizona peaks not paired here.

22. A Dispersed camping is allowed anywhere in the park

Dispersed camping is banned, not allowed anywhere. The park does protect the Rincons and requires a recreation.gov permit for designated-site camping only.

Lesson 19: Key Concepts

1. D East of Tucson

The Rincon Mountains lie east of Tucson. North of Tucson is where the Santa Catalina Mountains rise, so that is the tempting wrong answer.

2. B Mica Mountain

Mica Mountain is the high point of the Rincon range. Rincon Peak is a lower Rincon summit, and Mount Lemmon is the popular summit in the Santa Catalinas.

3. A Mount Lemmon

Mount Lemmon, a local recreation area, sits in the Santa Catalina Mountains. Mica Mountain is the high point of the Rincons instead.

4. C Its highest point is Mica Mountain

Mica Mountain is the high point of the Rincons, not the Catalinas. The Catalinas do lie north of Tucson, include Mount Lemmon, and are known for pine forests.

5. B Rincons east, Catalinas north

The Rincon Mountains are east of Tucson and the Santa Catalina Mountains are north of it. The other pairings swap or invent the wrong directions.

6. D A low, hot, dry saddle connecting the Rincon and Santa Catalina Mountains

Redington Pass is the low saddle that connects the Rincon and Santa Catalina Mountains. Known for hot, dry conditions and limited shade, it is the key transition point between the two ranges.

7. C Oracle Ridge

Oracle Ridge descends from the Santa Catalina Mountains toward the town of Oracle. Redington Pass is the low saddle between the two ranges, not a descent toward a town.

8. A Exposed and rocky

Oracle Ridge is known for exposed, rocky terrain with sweeping views. It is not a shaded, wet, or flat trail.

9. B Hot and dry with limited shade

As a low saddle, Redington Pass is hot and dry with limited shade, making it a demanding transition point rather than a cool or forested one.

10. D It is the low saddle connecting the two ranges

The low saddle connecting the ranges is Redington Pass, not Oracle Ridge. Oracle Ridge genuinely descends from the Catalinas with sweeping views and rocky terrain.

11. C Giant cacti and desert landscapes

Saguaro National Park is famous for its iconic giant cacti and desert landscapes near Tucson, not forests, waterfalls, or coastal features.

12. A Two

Saguaro National Park is divided into two districts, one of which borders the Rincon Mountains.

13. C Southeast of Tucson

The Cienega Creek Natural Preserve lies southeast of Tucson and connects toward the Rincon Valley.

14. B Riparian areas and grasslands

The preserve features diverse habitats including riparian areas and grasslands, not alpine, forest, or coastal environments.

15. A Saguaro National Park

Saguaro National Park is split into two districts, one of which borders the Rincon Mountains. Cienega Creek connects toward the Rincon Valley but does not border the range this way.

Sources

Lesson sources: Arizona Trail Association — Passage 9: Rincon Mountains; Wikipedia — Rincon Peak; National Park Service — Saguaro National Park: Nature & Science; Wikipedia — Mica Mountain; Wikipedia — Rincon Mountains; National Park Service — Manning Camp Trail restoration (Manning Camp Trail designated part of the AZT, 2012); National Park Service — Tanque Verde Ridge Trail; National Park Service — Saguaro National Park: Rincon Valley Area (Hope Camp Trail); Wikipedia: Mount Bigelow (Arizona)

- Arizona Trail Association — Passage 9: Rincon Mountains — https://aztrail.org/explore/passages/passage-9-rincon-mountains/
- Wikipedia — Rincon Peak — https://en.wikipedia.org/wiki/Rincon_Peak
- National Park Service — Saguaro National Park: Nature & Science — https://www.nps.gov/sagu/learn/nature/index.htm
- Wikipedia — Mica Mountain — https://en.wikipedia.org/wiki/Mica_Mountain
- Wikipedia — Rincon Mountains; Wikipedia: Rincon Mountains — https://en.wikipedia.org/wiki/Rincon_Mountains
- National Park Service — Manning Camp Trail restoration (Manning Camp Trail designated part of the AZT, 2012) — https://www.nps.gov/sagu/learn/news/gaoa-funds-trail-restoration.htm
- National Park Service — Tanque Verde Ridge Trail — https://www.nps.gov/places/tanque-verde-ridge-trail.htm
- National Park Service — Saguaro National Park: Rincon Valley Area (Hope Camp Trail) — https://www.nps.gov/sagu/planyourvisit/rincon-valley-area.htm
- Wikipedia: Mount Bigelow (Arizona) — https://en.wikipedia.org/wiki/Mount_Bigelow_(Arizona)

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