



DAVID CHOJNACKY PHOTOS

Crew member Max Miller from Michigan completes various stages of moving, setting and tapping in rocks for check dams.

Step-by-step process

A look at what it takes to maintain Tucson’s trails

CINDY COFFER CHOJNACKY
Special to the Arizona Daily Star

Douglas Spring trailhead in Tucson’s Saguaro National Park East is well known to the masses who hike or jog the popular system, but few likely have any idea about the heavy maintenance and restoration work that keep the trails in place — or the giant rocks hidden under many of the slopes they tread.

But on a recent spring morning, that work was underway near Bridal Wreath Falls, about 3 miles up the Douglas Spring Trail.

Here, a dozen members of the Saguaro Trail Crew had set up their workplace for the next few days. Along a stretch of trail just above a wash, they were building what looked like large stone “steps” up the trail ascent.

The “steps” you see on Douglas Spring Trail are actually small “check dams,” explained Zak Beyersdoerfer, assistant volunteer coordinator and trail crew member.

“Hikers complain about them because they are hard on the knees, and horses try to avoid them making side trails which defeat their purpose — but we put them in to create a level area that slows down water velocity to retain soil,” he said. “The goal in building trails is to conserve soil and reduce erosion.”

For a mild grade, like the Bridal Wreath Falls section, each check dam had an almost level soil bed up to a “dam” rock with a short drop to the next dam bed. A completed section looked like mellow steps with a large flat soil bed in between. Because of grade, a steep area like the first climb



The magic of the check dams is hidden beneath the surface. Crews transport, dig holes for, bury and perfectly set large rocks to create the dam that holds the bed in place.

up from Douglas Spring Trailhead, may require shorter beds and higher “dams,” appearing much more like a steep staircase to the unhappy hiker.

“We try for a maximum of 8 inches with each step rise to try to balance soil retention with hiker comfort.” But some rocks on the trails exceed that height, he noted.

But the real magic of the check dams is hidden beneath their surface. The crew transports, digs holes for, buries and perfectly sets large rocks to create the dam that holds the bed in place.

Therefore, the visible “step” is generally a much larger rock buried deep beneath the surface. In addition, small rocks are carefully placed and tapped into tight alignment on either side of the large rocks to get perfect dam height to minimize soil erosion.

A completed set of about nine to 10 check dams showed only the large flat “steps” and not all the intricate rock work beneath.

For the most part, an individual crew member could create a “check dam” using hand tools.

Crew members could be seen moving a large rock over half their size by using a steel bar for leverage. The big rocks are collected and rolled down from the wash. Using pick and shovel, a builder digs holes for rocks placed as foundation of check dam — both the flat rock buried under the bed and rock dam that will hold back water. When rock is moved into a pit just right, the builder chisels it to fit, then places small rocks on the side called “gargoyles” to closely fit rock into place. The builder uses a soft hammer with sand to bang rocks into place without cracking them.

And yes, sometimes after working for hours getting a big rock placed, a tap from the hammer and it splits. Trail work teaches patience, Beyersdoerfer said. It might be a half or entire day just shaping and chiseling rocks into place for one check dam.

“If you get frustrated with the work, it’s you, there is nothing but patience here,” Beyersdoerfer said. “The Sonoran desert has taught me. It has such resiliency. It keeps things in check and then springs forth when it’s time.”

Besides the daily hiking (6 miles round trip for this particular project) and physical work, “you get to put your own artistic touches on the rock work,” he said.

Please see **TRAILS**, Page E4



VIEW: Take a look at Saguaro National Park through the years with this historical photo gallery.

Point your smartphone camera at the QR code, then tap the link. [NEWSVU](#)

Syrian baker’s treats support refugees

ELLICE LUEDERS
Arizona Daily Star

Thin cigars of baklava with pistachios, baklava with walnuts and honey, made with nearly translucent filo. Bird’s nest treats with tiny noodles of pastry and juicy whole cashews in the middle.

Tmrreya look like granola bars but are dramatically lighter and more indulgent. They’re made out of dates, cardamom and biscuit and covered with almonds, cashews and pistachios. Their richness and delicacy reminds you why nuts or cheese can be desserts, when done right.

These are the Syrian desserts that Marwa Alfandi makes for ELFA — a nonprofit that helps refugees from the Middle East

Learn more

For more information about ELFA, visit [elfaempowerment.org](#).

Iftar at the Islamic Center of Tucson, 901 E. First Ave., is every day of Ramadan after sunset, around 6:50 p.m.

find community and support in Tucson. When she arrived in Tucson six years ago, a friend through ELFA helped her cultivate baking skills using recipes Alfandi learned from her mother back in Syria.

ELFA also connected her with a mosque, the Islamic Center of Tucson (ICT). The organization helps new generations of refugees

with everything from ride shares to doctor’s appointments to collecting diapers or groceries. ELFA also works with the International Refugee Committee to connect with and advocate for refugees in Tucson.

“I need to say that ELFA needs more volunteers,” Alfandi said, “to help the new refugees from Afghanistan.”

Alfandi’s favorite desserts she makes are the pistachio bird’s nests “because they’re not too sugary,” she said.

During Ramadan, the holiday of fasting that lasts from April 2 to May 1 this year, she limits her sugar intake. When she breaks her



ELLICE LUEDERS, ARIZONA DAILY STAR

From left to right: Walnut baklava, bird’s nest desserts with pistachio and cashews, tmrreya and pistachio baklava from Marwa Alfandi.

Please see **BAKER**, Page E4

NEW YORK TIMES CROSSWORD

ANSWERS / E2

ORDERING SECONDS
BY DAVID W. TUFFS / EDITED BY WILL SHORTZ

David W. Tuffs, of Pacific Grove, Calif., is a fourth-year linguistics student at the University of California, Santa Cruz. In his spare time he writes for his school's satirical newspaper, Fishrap Live! This is his third crossword for The Times and his first Sunday. Planning the theme involved "manually sifting through endless lists" of words — which sounds tedious, but he enjoyed doing it. — W.S.

- ACROSS**

1 Sexy one

10 Treat that's dangerous to fillings

15 It has cameras set up around the House

20 Home of the Hittite Empire

21 Novelist Zola

22 Word with box or gloves

23 Unwavering

24 Bit of cinema décor

26 Latin verb that's a letter off from 9-Down

27 Sagelike

28 Get ready for dinner

29 Man-eaters

30 Demeanor

32 Puts the pedal to the metal

34 Outbursts of megalomania

39 Boglike

40 Educator Khan who founded Khan Academy

43 -esque

44 "Ugh, we have so much to sort out"

47 You might come to one suddenly

50 Winston Churchill gesture

52 They're out on their own

54 "Word on the street is ..."

55 Antiquated source of light

58 Toy brand with colorful rods and gears

59 Partner of dark

60 Starts a course, with "off"

61 Where you might see scrolling credits?

64 Heidi of TV's "Making the Cut"

66 The Arthur Ashe Courage Award and others
- 67** Spectators taking potshots, collectively

70 Will Smith's actor/rapper son

73 Quickly join hands?

74 G or K

75 "Roll Tide!" school Relishes

80 Eats

82 Feature of a healthy dog

84 Fjord, e.g.

85 Like Hathor, goddess of motherhood

89 Film character who shouts, "You are a toy!"

90 Fish with a prehensile tail

92 Primitive time

95 German article

96 Instagram hashtag accompanying a nostalgic photo

97 Two-fifths of a quarter

99 Birthplace of three major world religions

101 What an agoraphobe avoids

105 Uber offering

106 Group email greeting

108 Class

109 "That so?"

111 It's not light reading

115 Advances in a baby's cognitive development

117 Demonology and such

119 Show vanity, in a way

120 Face-planted

121 Cocktail often made with Tennessee whiskey, ironically

122 Looks long and hard

123 Class

124 Not get tense
- 4** "Please, I'll go with you"

5 Friend abroad

6 Home of many schools in the Big Ten Conference

7 Uses chrism on

8 Chuckles online

9 Language that's a letter off from 26-Across

10 Tantalize

11 "... that's ___"

12 When many commutes begin

13 Converse

14 "___-haw!"

15 Favorite dog breed of Queen Elizabeth II

16 Where bats and birdies are found

17 ___ the Frog (internet meme)

18 God with a helmet

19 Rapper with the platinum albums "Street's Disciple" and "God's Son"

25 Skater Harding

31 The third of Chekhov's "Three Sisters"

32 Iota

33 Valuable deposits

34 Turning point

35 Actor/activist Davis

36 Stretch

37 Woman's name that's part of the body backward

38 Contacts quickly, in a way

41 Imitation

42 Fertile mixtures

45 Finished the golf hole

46 One might be cold or dry

48 Scatterbrained

49 Shot, so to speak

51 Plot device, in brief?

53 Rejoice (in)

56 Debt holdings

57 Bouts with pay-per-view events, for short

59 Transition
- DOWN**
- 1** March madness figure?
- 2** Animals in hibernación
- 3** Twitches

1	2	3	4	5	6	7	8	9		10	11	12	13	14		15	16	17	18	19
20										21						22				
23										24						25				
26						27				28						29				
			30	31					32					33						
34	35	36					37	38				39					40	41	42	
43				44						45	46		47			48				49
50			51					52				53				54				
55						56	57			58						59				
60						61		62	63		64			65		66				
					67					68				69						
		70	71	72				73					74				75	76	77	78
79									80			81			82		83			
84						85	86					87	88			89				
90						91				92				93	94			95		
						96				97			98		99			100		
												103	104			105				
		106	107																	
115								116						117			118			
119								120						121						
122								123						124						

NO. 0417

- 62** Left-leaning organizing grp.

63 Like pronounced muscles

65 Feeling described by this: :|

67 Australia's "City of Light"

68 Covers for campers

69 Spat
- 70** Former Fed chair Yellen

71 Classroom with cameras, for short

72 Executes perfectly

75 "That's just awful!"

76 One end of a cell

77 ___ circus

78 To now

79 Beyoncé, to Solange, informally
- 81** Tundra or savanna

83 Fabric in a flat cap

85 Leprechaun's home

86 Idaho, with "the"

87 Nickname in "Star Wars"

88 Country code for Holland in the Olympics

91 N.F.L. star ___ Beckham Jr.
- 93** Supermodel Lima

94 Like many a beta release

98 Reaction reducer

100 Tackles

102 "I have other ___, sorry"

103 Norse pantheon

104 Birthplace of Zeus

106 Female figure in the "Iliad"
- 107** Name akin to Agnes

109 Many mainframes

110 Blind sight

112 Number between sette and nove

113 Some petting-zoo noises

114 Seaside bird

115 Dash fig.

116 Twitch user's bane

118 Comic Penn

Trails

From E1

Life on the trail

Observing several crew members at work, care, patience and artistry were evident.

Saguaro trail members come from all over the country. This group included folks in their 20s and 30s from Michigan, Delaware, Maine, West Virginia and California. Beyersdoerfer is from Georgia.

He started his trails career working for American Conservation Experience (ACE) — a national group based in Flagstaff (with other regional offices) that recruits and trains trail crews for projects all over the country. This turned out to be a common start for several of the trail crew.

Beyersdoerfer has worked in Great Smoky Mountains National Park in North Carolina; parks in New Jersey and Georgia; and in Arizona and Grand Canyon National Park, the Havasupai Indian Reservation and Tonto National Forest (Pinal Mountains near Globe.)

After a couple of years' change from trail scene as a gardener (which evoked an interest in natural history and biome ecology), Beyersdoerfer took a job with Saguaro in 2001. "The West had left a lasting impression." With an academic background in film and sociology, he liked the mix of outreach, trail work and conservation education. In the summer, he works with the park's Youth Conservation Corps (a federal program that gives youth summer jobs in national parks, forests and wildlife refuges).

The trail crews are seasonal. Saguaro National Park hires 24-25 people (four crews of six members) during its winter season November-May; along with six to 12 trail crew members in the summer. Saguaro is ideal for many seasonals, who also work temporary jobs in colder climate areas like Rocky Mountain or Yosemite national parks.

"When the snow flies, it's time to move south; when the snow melts it's time to work in the mountains," explained Louis D 'Andrea, a West Virginia native on his second tour at Saguaro.



KELLY PRESNELL PHOTOS, ARIZONA DAILY STAR 2021

A hiker navigates the Douglas Spring Trail in a sea of saguaro, mesquite and palo verde.

"Coming down here for the winter is nice." He has worked in Adirondack State Park in New York, at Yosemite, and all over Arizona. His summer job is on the Monongahela National Forest in his home state. How long will he be a trails professional? "As long as my body holds up."

Rory McLaughlin from Delaware started his trails career with ACE in California, cutting out fallen logs on the John Muir Trail in the Sierra Nevada mountains. It's his ninth or 10th season alternating months in the southwest and in the mountains. "For a while there, I was hitting a sweet spot with eight months on and four months off."

While the two crews were working on Bridal Wreath, two more were rebuilding eroded sections on the Quilter Trail, a section of the Arizona Trail on the south side of Rincons linking Manning Camp and Hope Camp trails.

At the start of the season, in November, all trail crews were work-



A trail runner heads back to the trailhead as sun sets over the Douglas Spring Trail.

ing on West Turkey Creek Trail between Miller Canyon and Deer Head Spring on the east side of the Rincons with two base camps: one at the bottom end of a trail in lower Turkey Creek near Miller Canyon and one at Spud Rock Spring, an official Park Service campsite near the top of Mica.

The Spud Rock camp was luxury: a large canvas cook tent, wood burning stove, solar power lights and other equipment packed in by Saguaro's packer and mules. "We had a Thanksgiving feast," Beyersdoerfer added. No camp cook: each crew member took turns preparing a favorite meal for all. An un-

expected snowstorm in early December shut down that operation.

For December and January, the crews rotated through Organ Pipe National Monument near Ajo, working on trails and sealing old mines with native rocks and soil.

Not all parks have trail crews, so Saguaro often loans out its crews to Organ Pipe, Tumacacari, Coronado and Chiricahua monuments, all nearby desert areas.

This month, crews are working on a nearly level trail west of Douglas Spring trailhead, installing logs and moving tools between work sites. Some members are already leaving for their summer jobs; a few will stay through May for wind-down work including logistics, gear inventory, sharpening tools and sanding down handles and hammers.

The summer trail crew "tries to stay ahead of the heat," often working from Manning Camp at 7,920 feet on a flank of Mica Mountain, working on the large trail system that loops Mica.

Share your summer events with us

As evidenced by the high temps, summer is fast approaching.

To help you get through those triple-digit days, Caliente is putting together a list of things to do around Tucson to keep you occupied for 100 days. You're welcome.

If your business or organization has events planned, indoors or out, between May 19 and Aug. 27, send an email with details and photos to caliente@tucson.com.

The deadline for submissions is May 6.



REBECCA SASNETT, ARIZONA DAILY STAR

Violet Thomas, 4, watches a water gun while playing inside the new splash pad at Morris K. Udall Park, 7200 E. Tanque Verde Road, next to the swimming pool and recreation center.

Baker

From E1

fast after sunset, a practice called Iftar, she savors the bird's nest with a fresh cup of unsweetened Turkish coffee.

Whether she breaks her fast with her family, or with friends, or at ICT, the food is all homemade: sambusas, soup, kibbeh, chicken and rice, doulmas.

"ICT has a program during Ramadan where

they cook meals for anyone who wants to break fast with us," Alfandi said. "Refugees, Americans, Muslims," she said.

While the treats she bakes at home — she's enrolled in Pima County's cottage bakery program — are celebratory during Ramadan, Alfandi bakes them to benefit ELFA year-round. You can buy them through her Facebook page ([tucne.ws/masweets](https://www.facebook.com/tucne.ws/masweets)). She uses PayPal or can accept cash when you pick up the tray of sweets.

Alfandi is not the only Muslim making food for her community during Ramadan. Al Madina Halal Kitchen is cooking up halal chicken mandi and lamb kabsa, falafel and shawarma for those breaking their fast (and non-practicing Tucsonans who love Yemeni food). Stores like Babylon Market and Caravan Mid-eastern Foods supply the ingredients community members like Alfandi need to make Arabic delicacies in their homes.