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REMEMBERING DR. FERN P. DUVALL II

e came to save the 'alalā, the native Hawaiian crow, from certain extinction. He stayed 38 years, no doubt because there was, and still is, so much more saving to do. When Fern Duvall died last February at age 68, he had saved one

thing for sure—a sense of hope for the future of wild Hawai'i.

He was a field biologist to the core, and he regarded the work of conservation as an ecoA SENSE OF HOPE FOR THE FUTURE OF WILD HAWAI'I

system. Our group, the Friends, is part of that ecosystem, and Fern was a leading voice for us. And he was a founding member of Maui Invasive Species Committee, and he advised the Brown Tree Snake Task Force, Maui Forest Bird Recovery Project, Maui Nui Seabird Recovery Project, Maui Native Plant



Society, American Bird Conservancy, and Hawai'i Audubon Society. His employer for 38 years, in one capacity or another, was the State of Hawai'i, and this let him be guardian for the whole Maui-ful of endangered landscapes, including the Kanahā Pond Wild-

life Sanctuary and our county's ten precious Natural Area Reserves.

In his managerial role with the State, "he was always very aware of what Haleakalā National Park was and is doing," says his wife Mary Santa Maria. She herself is a

longtime FHNP board member. In fact, she says that she and Fern first struck up the relationship while on service trips after he joined the board in 2008. "He worked very closely with the Park. He managed a lot of the land bordering the Park in Kaupō and Hāna side. Cooperation—he was very good at that."

It might not be irrelevant to point out that Fern Duvall grew up in a big family. Also that he was fascinated with wildlife even as a youngster, in Michigan, raising Canadian geese as pets and maintaining his own homemade bird sanctuary. His siblings told Mary, Fern's widow, "Fern could do no wrong, and anything he wanted he got." Fortunately, what he wanted was a biology degree from University of Michigan, followed by graduate studies in Germany and field work in Europe and Africa.

Part of this training involved working with corvids—crows. So there was an almost Hollywood-like inevitability to his accepting, in 1984, a contract with the State of Hawai'i. His job was to save Hawai'i's only corvid even



though it had already become extinct in the wild. Fern developed methods for successfully incubating and rearing these crows. Part of the fix involved moving the captive birds away from the Big Island and establishing a bird conservation facility in Olinda, Maui.

In 1988, impressed with Fern's acumen, the State offered him more than a contract. They gave him a position as the State Aviculturist. The State of Hawai'i employed him from that point until his retirement at the end of 2021. He became a Wildlife Biologist in '96. Nine years later he shifted to the Natural Area Reserve System as its Maui Program Manager.

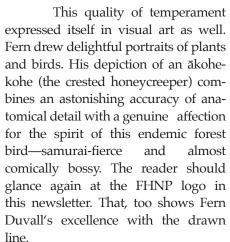
This list of achievements makes Fern Duvall sound like a bird specialist, but he had a range of knowledge as wide as the Hawaiian natural world itself. He loved our invertebrates, especially the snails. He was a skilled field botanist and an adventurous hiker. He once discovered a new species of Cyanea, a genus of showy shrubs that evolved with dazzling diversity in the Islands. Once described, this species became his namesake: *Cyanea duvalliorum*.

Continued on page 2

He was not the sort of manager to hang around the water cooler. "You've got to get out into the places," he said. "You've got to get out into the environment. You cannot managewellifyou do not understand the resources." The video in which he says this, easily found in an internet search, is a good self-introduction with a little advice to conservationists. "It's very important to study things," he says while standing in front of an estuary at Kanahā Pond. "Study, study, study. Study lots; talk less."

And he followed his own advice. He listened, so people listened to him. His manner was calm, his voice reedy and precise, his smile genuine but subtle. And yet "he was

persistent and insistent," said Mary Santa Maria. "He could be pushy, but in a gentle way. He knew what he knew."



His commitment to Friends was active and genuine, but his perspective on issues was necessarily broader. He worked closely with the Park, and yethis working mission involved State lands in Kaupō and the Hāna area, wild landscapes beyond Park boundaries. In a sense, he couldn't help but see our zation as the Friends of Haleakalā, period. In other words, caregivers to the mountain's ecological entirety. To him, the Park was a partner in a continuum from ocean to summit—"a lei of aloha," said Mary. He tried not

to impose his own perspective on the Friends, either. "He said, 'If I give my point of view to the Friends and they adopt it, then the Friends are a voice of the DLNR [Department of Land and Natural Resources].' He didn't want that. He wanted the Friends to be more of a community institution."

Dozens of admirers spoke at Fern Duvall's memorial gathering seaside at Waihe'e Coastal Preserve. There, retired State forester Bob Hobde said, "He was such a biologist. All of us realize on Maui that, in conservation work, to

understand

what's going on in the environment, you need to know not only about the target you may be looking at but how

the insects and the plants and the other critters in the forest all work together. That's what's made Maui successful in the conservation field. That we all try to learn as much about everything together, and try to have a holistic approach to our management. It shows in all the projects we have; the watershed partnerships, the forest and wildlife people, Department of Agriculture, everybody wants to kōkua. It's wonderful. I just miss him. We all do."



Friends board member Kī'ope Raymond added, "Fern not only brought his wisdom and ideas about the most efficient ways to protect, preserve, and perpetuate; he also brought physical dedication to the work that needed to be done. An 'ōlelo no'eau, a Hawaiian language proverb, says, "'A'ole huli ka lima i luna, e huli ka lima lalo." Don't go around with one's hands facing up. One has to turn one's hands down to the 'āina to make the most positive difference."

It is a great honor in these reckless times to be remembered by the simple title "field biologist." Fern Duvall stands as a figure of conscience for the dominant primate of our day, *Homo sloppiness*. He knew what he knew.



NEWS & HIGHLIGHTS

HNP ranger Kawailehua Domingo attends the Friends' board meetings and generally keeps an eye on us, all part of her duties as the Park's Volunteer Coordinator and Community Liaison. When we asked her what's new from the front half of 2022, she provided these talking points. Mahalo nui. Kawai!

STARGAZING AT THE PARK

The best reality check on planet Earth: to look at the night sky. Look where we are. Best place to do this: 9,740 feet in the air in the middle of the Earth's biggest ocean. Next to the Haleakalā Visitor Center, sitting or lying in the open air.

Best advice: dress warm! Bring something softer than lava rocks to sit or lie on. Also, bring a red-light flashlight or headlamp.

Reservations are not required. Skygazers will have to pay the customary Park entrance fee, but not on September 24, which is National Public Lands Day. Plan to arrive one or two hours before sunset to secure a parking spot. Staff and volunteers will be coordinating carpools to the top. If you might be interested in being one of these volunteers, contact Kawai, 808-572-4487 or Kawailehua_Domingo@nps.gov.

Harry water

RESTORING KAPALAOA WILDERNESS CABIN

Backcountry visitors who use Kapalaoa Cabin will now enjoy brand new

floors, a fresh coat of paint, and new dishware. The multi-week upgrade was completed on June 10. Volunteers from FHNP were able to contribute some sweat equity to this high-altitude project

Wilderness Kapalaoa Cabin was built in 1937 by the Civilian Conservation Corps alongside (CCC) working journeymen carpenters hired by the National Park Service. In 2009, Kapalaoa Cabin was determined eligible for the National Register of Historic Places as a contributing feature of the Civilian CCC's Crater Trail District cultural landscape.

The cabin is situated within Haleakalā Crater at 7,250 feet elevation and set on a grassy field near the Kaupō Gap. The hike runs 5.6 miles from the Keonehe'ehe'e (Sliding Sands) Trailhead. The distance on Halemau'u Trail is 7.2 miles. Kapalaoa Cabin does not

have a separate wilderness tent area. Like the other two Crater cabins, though, it provides a pit toilet and access to non-potable water. Each cabin includes wood-burning stove,



propane stove, and twelve padded bunks. Not electricity. Go to the Park's website for more details, and to reservations.gov for bookings.

SKY TALK

Saturday, July 30, 8:00–8:45 pm
Let a park ranger take you on a tour
of the Universe. Learn about planets, stars, and deep space objects
that populate our cosmic home.

TELESCOPE PARTIES

Friday, August 26, from 7:45–9:15 pm Saturday, August 27, from 7:45–9:15 pm Saturday, September 24, from 7:30–9:00 (free entrance day)

See Saturn's rings live and in-person. Discover the types of deep space objects that lie outside of our solar system. Park staff will set up telescopes for nighttime viewing, and they will answer question while you sightsee the sky. Viewing will depend on the natural conditions, of course.

Boardmember Andy Fox handles the roller.



HEROES AHEAD: THIS YEAR'S SCHOLARSHIP AWARDS



Repairing wild ecosystems takes time—in fact, generations. What can we do now to encourage our young adults in this vital work?

This year the Friends have three answers to that question, three scholarships of \$1,000 each. Recipients are expected to be entering a field related to the preservation of ecosystems such

as Haleakalā. They must be Hawai'i residents and college-enrolled students. To qualify, they submit school transcripts, letters of recommendation, and personal statements of 1,200 words minimum.

Last year the Friends gave two

such awards, and we called them The Don Reeser and Mary Evanson Memorial Scholarships. This title expressed our aloha for two of FHNP's founding figures, people who dedicated their lives to the preservation of Haleakalā's bio-

logical integrity.

This year we have chosen to add a third award, and to add Fern Duvall's name to the title. The result is a title multi-syllabic enough to make a splash on any resume. Now we are very pleased to announce the three 2022 recipients of The Don Reeser, Mary Evanson and Dr. Fern Duvall Memorial Scholarships.

We encourage these college students to become leaders in the cause of environmental responsibility. If they do, one thing's for sure. They will never run out of work.

THERE'S A FUTURE FOR CONSERVATION — THANKS TO THESE KIDS WHO ARE COMMITTED.

We are very pleased to announce the three 2022 recipients of The Don Reeser, Mary Evanson and Dr. Fern Duvall Memorial Scholarships. These college students have their lights on and their enthusiasm focused on wilderness conservation. We are encouraging them to become leaders in the cause of environmental responsibility.

ANN-MARIE ANDRES

Ann-Marie **Andres** is an undergraduate at University of Hawai'i Maui College, where she Sustainable majors in Science Manage-Her ment. prior experience in conservation is impressive for her young age. She started with an internship at NHHP (Nā

Hua Ho'ohuli i ka Pono), a Maui program focused on cultivating the conservation leaders of tomorrow. They placed Ann-Marie with The Nature Conservancy in Waikamoi Preserve. There she learned about invasive species removal—everything from pines to gingers—while immersing herself in one of our last remaining native rain forests.

She writes: "Hiking extensively through thickets of native and shrubs, trees and trekking up and down steep gulches... opened my eyes to how grueling conservation work can be



and how significant it is to maintaining the natural resources we take for granted. Without the work that conservation professionals do, many of our native forests would be non-existent and critical resources would be severely threatened."

After this experience, she went to work raising native plants with an outstanding local business, Native Nursery Maui, then got involved with many other environmental groups, from Coral Reef Alliance to Kipuka Olowalu, Maui

Kipuka Olowalu, Maui Nui Botanical Garden, Auwahi Forest Restoration Project—in fact, the list of her experiences out-planting, seed-collecting, and volunteering testifies not only to her stamina but also to the abundance of conservation projects at work every day on this island.

"Upon completion of my bachelor's degree, I aspire to immediately enter the conservation field.... I aim to continue making a difference in maintaining our natural resources for future generation to enjoy."



MAX McGRATH

Max McGrath is a senior at Montana State University with a major in fish and wildlife ecology. He remembers being astonished as a child by alligators in the Everglades and, more recently, deeply moved by the bison at Yellowstone National Park as exemplary survivors of near extinction. But his commitment to conservation is primarily rooted on Maui, where he grew up in the Waihe'e-Waiehu area with its daily view of Mauna Haleakalā. He says that this view is one of the "best sights in the world" and an important factor in his choice of ecology and conservation for his studies and professional life.

While growing up, he spent time at Kanahā State Reserve sitting in a blind with binoculars and camera watching birds. Soon he was exploring Keālia National Wildlife Re-

serve for the same purpose. As a Boy Scout he learned to love hiking and camping, and he began putting his attention on the native honeycreepers. "People think of extinction as occurring in the distant past to bizarre antediluvian creatures unfit for survival," he writes. But "Hawai'i's native birds have been decimated by man." With his mind on a future in conservation, he began volunteering at the Waihe'e coastal refuge of the Hawai'i Island Land Trust.

When he first experienced Haleakalā Crater, as a Boy Scout, "I felt like Neil Armstrong and Buzz Aldrin stepping onto the surface of the moon!" That experience cemented his desire to work in conservation in Hawai'i.

Max hopes to earn his master's degree in ecology and conservation from the University of Hawai'i at Hilo, then establish his career here in the Islands.

REMY ROMO-VALDEZ

Remy Romo-Valdez is a fourthyear student at University of Hawai'i Maui College's Sustainable Living Institute. He developed an interest in sustainability when he was in high school taking classes in engineering and in agriculture. Logically enough, the combination of the two subjects got him curious about aquaponics—the concept of raising both fish and fresh vegetables communally using precisely monitored vats of water.

As fate would have it, Remy's local U.H. campus has an aquaponics facility as part of its Sustainable Science Management degree program. That degree is Remy's goal. While he studies

agricultural and marine biology, he hopes to link scientific advances with the traditional Hawaiian practices that formerly produced a sustainable food supply for pre-contact Hawai'i.

In addition to his formal studies, he works part-time as a garden technician and program assistant for the college's aquaponics greenhouse project, known as WaiPono Farm. This explains why you see a bunch of fish in our photograph of Remy. He was at work that day.

He is a key member of WaiPono's development team, say his professors. This team has created a new ethnobotanical garden on the UHMC campus. And it has designed, and maintains, the project's greenhouse, which provides tilapia and fresh produce for the college's culinary program.

Remy's goal is to educate people about "the environmental issues we are facing globally" by making Maui an example of sus-



tainability for the rest of the world. And he'd like to do it through music. "I sing very well," he modestly admits.



VOLUNTEERING WITH THE FRIENDS

SERVICE TRIPS

The following "job descriptions" reflect the advice and experience of those who have gone before. If you wish to get involved, contact boardmember Andy Fox: andy@fhnp.org

KIPAHULU TIME-TRAVELER

You'll be driving or car-pooling to the Maui's eastern-most coastal region, which is also the ultimate sea-level stretch of Haleakalā National Park. You'll find a greenhouse and plant nursery at the baseyard close to the Park's bunkhouse where volunteers spend the weekend car-camping.

These service trips often feel like expeditions into the past. The Kīpahulu area is rich in archeological and cultural sites that tend to get overtaken by fertile foliage and beefy grasses. You will likely be working to slash vegetation from pre-contact lo'i kalo, shrines, and pohaku boundary walls. You and your cohort should expect to be pretty much alone in the Kīpahulu watershed, somewhere between Waimoku Falls at the top of the Pīpīwai Trail down to the cascades and pools at 'Ohe'o Gulch.

You'll see vividly why this area, before the 19th century, was more affiliated with the Big Island than with faraway Wailuku or Lahaina. And you'll have free time for the freshwater pools or the seashore, plus luscious group meals and conversation with your co-workers and the rangers.



BACKCOUNTRY CHALLENGE

Prepare for an adventure in the wao akua on a next-level trip inside Haleakalā Crater. These are demanding overnight backpacking trips with expectations of physical labor. They usually involve removing invasive weeds from off-trail locations. You need good physical conditioning, backpacking experience, and suitable gear. Some loaner gear is available, but sturdy hiking shoes or boots are an absolute necessity.

These trips succeed if service-trippers come with a great attitude and a desire to share. Expect to cooperate in traveling to and from the site, also with the work, meal preparation, and cabin cleanup.

The backcountry environment can be harsh. Expect extremes of temperature and weather. And yet the place is very fragile. Haleakalā NP is a "trails only" park, so wandering is not allowed except as necessary for the service work (accessing weed fields, for example).

But don't imagine you're being sent to a gulag. Service trips provide authentic pleasures. For instance, trip leaders love to answer questions about geology, history, cultural aspects, and of course the botany of invasive weeds and native plants. These service trips are essentially guided tours, and as such are very popular.

If a trip is cabin-based, you'll stay in a historic, rustic building with twelve bunks (four triple-deckers), also a wood-burning stove, two propane burners, and a sink with non-potable water (boil or filter before use). Bunks have mattress pads, and the kitchen has basic utensils. This is sweet shelter



for a wilderness area!

You can choose from three different sites. Each has its own distinctive qualities, as does every unique trip.

Hōlua is the closest backcountry site, located roughly four miles from the start of Halemau'u Trail, aka Switchbacks. There are three options for lodging at Hōlua: the visitor cabin (when available), a ranger cabin with limited space (four bunks), and a campground. Hōlua has a large population of cliff-dwelling Hawaiian petrels ('ua'u), which nest in spring (March-May).

Kapalaoa is the mid-crater site, situated about six miles down the Keonehe'ehe'e (Sliding Sands) Trail. The visitor cabin is the only lodging option. Kapalaoa offers ready access to weeds, to archeological sites, and to areas outplanted with native seedlings.

Palikū is the farthest site, sitting at the top of Kaupō Gap with views across to the mountains of Hawai'i Island. The site includes a ranger cabin, a visitor cabin and a campground. Expect more forest birds at this site, which is a major nesting area for 'ua'u and nēnē.

UPCOMING SERVICE TRIPS

Aug 19-21 Hōlua Ranger
Sep 3-6 Palikū Patrol
Oct 7-9 Hōlua Ranger
Nov 11-13 Kīpahulu

THE NURSERY

It is possible to volunteer and still get home at night to sleep in your own bed. You can join the nursery-tenders at the Baseyard Greenhouse, which has two missions: to propagate rare seedings for outplanting, and to preserve living specimens of the Park's most at-risk species.

Nursery volunteering happens on the first Tuesday of each month, generally from 9 am till noon. Numbers are limited, so plan ahead by reserving with boardmember *Mary Santa Maria*: 808-572-1584

The work mostly involves potting. Or washing pots. Sometimes volunteers sort rocks that were returned to the Park by rueful visitors. Service chores tend to be servile.

And yet you can hear real enthusiasm in the voice of nursery volunteer Judy Buettner when she describes working with inch-high seedlings of 'āhinahina, the Haleakalā silversword, moving them into two-inch pots, then three-inch pots. Once, she says, the crew was even asked to outplant the keiki into the wild. That opens the possibility of returning in years ahead to visit "your" silversword!

Judy is a well-seasoned Crater trekker on horseback, but these days she's favoring the companionship and nurturing purpose of the nursery. Her advice? "Dress warm." After all, this is a greenhouse for plants that evolved for life above timberline. It's their home, not yours. Prepare for wind/cold/rain. If you plan to bring tools or gloves, be sure to clean them prior. You don't want to spread weeds.

The nature of the work each month is determined by the Park's new horticulturalist, Chris Pavella. Often the vegetation crew is on hand. These botanical pros enjoy talking about the plants they love.



MEET SEBASTIAN SIEVERT

Greenhouse volunteers from last year will remember Sebastian Sievert, the nursery intern who often gave half-hour tours of the benches and the rare plants upon them. He's an O'ahu-born

2 0 2 0 graduate of University of Hawai'i at Mānoa's N R E M p r o -

WILL ALWAYS BE A CORE PART OF WHO I AM."

gram—Natural Resources and Environmental Management.

Not only is Sebastian pitch-perfect in the binomial nomenclature of botany; he has that slightly nerdy enthusiasm special to all true naturalists. After earning his Bachelor of Science degree, he scored a year-long E Ola Koa internship in the Park with emphasis on Vegetation Management. Besides his immersion in the biology of Maui's endemic plants, Sebastian learned wilderness first aid and helicopter crew skills. He monitored 'o'opu fish in streams, surveyed 'ua'u burrows, banded nēnē birds, and of course washed lots of pots.

After completing this internship, Sebastian transferred his personal mission over to Kalaupapa, Moloka'i, in order to "serve the wahi pana by helping to protect its ecosystem and preserve its biocultural history." Last April he gave a zoom presentation of his internship to the annual meeting of the FHNP members. He credit-

ed Friends volunteers with greatly boosting the annual outplanting of 'ahinahina. He described the Park's Greenhouse as representing "thousands of acres in just several hundred square feet of

nursery. That includes rare species you will not typically come across." And he ended the visit by saying what all

Geranium cuneatum

were glad to hear: "Conservation will always be a core part of who I am."

i'iwi by Fern Duvall

LOOKING FOR BIRDS EVERYWHERE

Every five years the National Park Service, along with the State of Hawai'i and other partners, conducts surveys throughout East Maui in order to estimate the size of forest bird populations. The previous set of surveys, performed in 2017, revealed troubling declines in a number of bird species. The grimmest of these reports counted perilously small populations of kiwikiu and 'ākohekohe, two critically endangered native species.

The good news from the 2022 survey: "both species were observed in various locations." So much for the good news.

Both species remain rare and limited to small areas of high-elevation forest. Biologists say the last population of kiwikiu—a six-inch, yellow-green honey—

TROUBLING
DECLINES
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creeper also known as the Maui parrotbill—has dwindled to perhaps 135 birds and might vanish altogether within the next two years.

Haleakalā National Park is home to all six of Maui's remaining native forest bird species. The rarest of these birds is the kiwikiu, *Pseudonestor xanthophrys*. The 'ākohekohe or crested honeycreeper,

Palmeria dolei, numbers at fewer than 2,100. The 'ālauahio (Maui creeper), Paroreomyza montana newtoni, has faced a similar drop in population. All three species are found only on Maui.

These surveys require that dozens of dedicated workers spend weeks traversing difficult terrain. Surveys on Maui were first conducted in 1980 and represent one of the longest datasets in Hawai'i. From these data we can estimate population trends and determine changes in the distribution of bird species, essentially checking the pulse of these populations. To learn more, go to the Park's website and search for "forest birds."

Aside from habitat loss, the primary culprits here are those darn mosquitoes, which carry avian malaria. Our native birds evolved without exposure to this disease, so they lack immunity to it. A single mosquito bite can kill a honeycreeper.

Is the situation hopeless?

Not so, says the U.S. Department of the Interior. At the end of June it promised to invest \$14 million in the rescue of these birds. That money will come from Congress's Bipartisan Infrastructure Law, a portion of which was targeted at ecosystem restoration and resilience. Funds will go toward abating the bugs and augmenting captive breeding programs. Said U.S. Rep. Ed Case, "The funding will assist the state in combating mosquitoes that especially threaten endangered forest birds found nowhere else in the world."



This nonprofit organization, directed by a volunteer board, serves as your agent in the good work of protecting an earthly treasure.

There are 240 National Parks in the United States. Which one is home to the greatest number of endangered species? Ours.

Covering more than 34,000 acres, our Park comprises 37 miles of trail, 88 employees, and almost that many volunteers who gave more than 3,000 hours of service last year. A million visitors a year make it Maui's biggest visitor attraction.

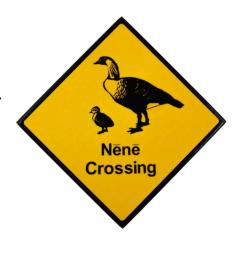
The Friends, a licensed nonprofit directed by a volunteer board, serves to promote, protect, and improve Haleak-alā National Park. Its general purpose is to support educational, cultural, research, and service activities relating to the Park and its ecosystems so as to leave them unimpaired for the enjoyment of future generations.

RENEW YOUR FRIENDSHIP

To become a member, simply donate as little as \$30. Memberships expire at the end of each calendar year. Any donations that arrive during the 4th quarter of the year hold good through the entirety of the next. They are tax-deductible.

YOUR MEMBERSHIP DOES THIS:

- sets up opportunities for you to engage with the Park as a volunteer.
- informs you of new developments at the Park, and of its history.
- provides funding for projects recommended by Park staff.
- creates a bridge between the Park and the public.
- advocates for the Park in public settings.



Adopt a Nēnē*

We prefer that phrase over

"donate to FHNP." It is much more to-the-point. And it allows us to recognize your membership with a gift that tells you "mahalo" (thanks).

- □ \$30 NĒNĒ ADOPTION PAPERS AND PICTURE POSTCARD
- \$50 THE ABOVE, AND A POSTCARD PACK
- □ \$100 OR MORE THE ABOVE AND A MATTED 5X7 NĒNĒ PHOTO

If you want, we will skip the mahalo gifts and put your entire donation to the cause of preservation. For that, just check the "waive gifts" box in the form below.

* The nēnē, or Hawaiian goose, is a magnificent native bird that has been rescued from extinction at Haleakalā National Park.

Mail the form below with your check, or use a credit card at fhnp.org	
☐ I want to become a Friend of Haleakalā.	-
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