

THE TIDINGS



LAKE MERRITT INSTITUTE

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“The Tidings” is an editorial newsletter. Posted opinions are not necessarily those of the City of Oakland

WELCOME RETURN TO SAILING at LAGOON MERRITT



Spring was in full swing in April with sunny skies, gentle winds mostly, and more relaxed public health regulations for visitors to Lakeside Park. All city personnel are required to be fully vaccinated against Covid-19, and must wear masks indoors. Customers are not required to show vax cards or wear masks if they stay outside. Precautions such as social distancing and staying home when sick are still encouraged. Call the Lake Merritt Boating Center for rental details (510-238-2196).

Another feature of springtime at Lake Merritt is equinox “great tides” (<https://www.oceanclock.com/>). At the vernal equinox, the sun’s orbit is more in line with the moon’s, joining their

gravitational pulls to create higher and lower tides. Lake Merritt is connected to the Bay and Pacific Ocean via the Lake Merritt Channel, and is more properly called “Lagoon Merritt”. It experiences two tidal cycles each day, high and low, if the 7th Street Flood Control Station tide gates are open. The boathouse requires boaters to stay 50 feet from the shoreline. April boaters, pedestrians and wildlife took high and low waters in stride and no mishaps were reported. Photo (above) by K. Noonan.

LAKE MERRITT THEMATIC MAPS EXHIBIT GLOWS!

Congratulations to teachers Tony Bald (Science) and Sanjay Vora (Art) and to the students and staff of St. Paul's Episcopal School for an amazing exhibition of student art at The Alice Collective expressing their love for our lake. The gallery was filled with informative and unique map posters about Lake Merritt created by the 6th-graders.

Themes ranged from history to wildlife to trash clean-ups. Thank you!



LMI in APRIL: 6180 gallons of trash removed from the lake by staff and volunteers in March.

Total trash collected so far in 2022 was **16,830 gallons**

LMI Director James Robinson hosted **237 volunteers**, gave 2 presentations and attended 2 meetings.

0.49 inches of rain recorded recorded by LMI rain gauge

THANK YOU TO OUR MARCH VOLUNTEERS! We appreciate your efforts and community spirit. Great Job! Volunteer groups: Achieve, Park Day School, Yoga Group and the LMI A-TEAM regulars. YOU can support the Lake Merritt Institute's important work. Go to our [website](#) to find out how. More photos in this email edition of The Tidings.

LOVE YOUR LAKE!



April Column: Chilly but Happy at Lake Merritt

– by Hilary Powers, Golden Gate Audubon



Photo by Johan Langewis

Skipping straight to the chase – yes, the March 4th-Wednesday Audubon walkers at Lake Merritt did get a good look at the Tufted Duck! He was between the islands and the bird paddock, near enough to shore for really clear views. The bright white flanks and all-black back still offer the best field mark for this bird, who generally appears to have no tuft at all. He's *got* a tuft – a ponytail easily four inches long, even – but it slicks down among the surface feathers until he shakes his head hard enough to make it flare out. Makes the hunt for him into a live-action Where's Waldo exercise: he swims with a flock of Lesser Scaup, which are only a hair smaller and also have white wings and heads that look black, along with brindled gray backs that just don't seem important at first glance....

Of course, we didn't know what was in store when we got together, though the 30 or so birders all Had Hopes almost high enough to keep them warm. (The morning started out damp and chill, surprising everyone after midsummer heat the day

before.) The lake around the islands offered plenty of entertainment, including truly ruddy Ruddy ducks flashing sky-blue bills along with lots of scaup, a few Common Goldeneyes, and a lone Canvasback. Scaup were also lounging around the beach at the end of the boathouse parking lot where the group meets, providing unusually good views of their undersides. The goldeneyes and the Canvasback were all females, as were the rest of their species encountered later – all their males seemed to have headed north already, though the rest of the winter regulars showed up in roughly equal number of ducks and drakes.

For the first time in a few months, Black-crowned Night-Herons were easy to find. We've always seen at least one, but this time they were more or less back in business as usual. One was perched in the sycamore tree beside the art&science center, and the group gathered to look at it, which inspired a fairly urgent warning not to get so close as to look straight up, or even almost straight. They produce at least half a cup of, um, greeting card at a time, they do, and you do not want to be on the spot to receive the message.

Double-crested Cormorants, on the other hand, were almost missing. I never laid eyes on one and was looking forward to real news to share: no cormorants at all at what should have been the busy season in the island rookery. (Someone later reported a fly-by, which spoils the story only slightly.) Last year we were down to two nests (from nine the preceding year and dozens a few years ago), and now it looks as though the trees may be entirely empty. Nothing seems to be wrong with the cormorant population – they show up in large enough numbers often enough to make me think they've just moved house elsewhere for a while, giving the lake islands a rest from their greeting cards.

Perhaps when one door closes, another opens.... At any rate, a Great Blue Heron kept bringing long sticks to one of the islands, laying them across a forked branch, and watching them bump down and away. A proper activity for the season, though we were a heron short – normally the male brings sticks and the female builds the nest, but this bird had no receiver for the gifts. Maybe next month....

A Caspian Tern flew over, starting the summer in March for the first time since 2011. (They're rare treats, never seen in the winter; the four monthly walks they graced last year were the most ever.) Meanwhile, several small grebes patrolled the lake between the islands and El Embarcadero, almost all well on the way into their party clothes. Most were Eared Grebes, with their pointy heads pointier than ever for the season and wide gold fans spreading behind their eyes, but we had enough of the long-headed Horned Grebes to talk about the differences. We also had a few Pied-billed Grebes in their demure version of breeding plumage – just as brown as ever, but with a black stripe around a whiter-than-usual bill and a neat black cravat covering the throat.

We also saw two Cooper's Hawks – one rose-breasted adult and one brown-and-cream striped juvenile, so it was clear it wasn't the same bird twice – and also our resident Red-tailed Hawk, this time sitting on the tallest of the baroque turrets on the brick tower on Bellevue instead of on one of the island trees where we usually find him. And we encountered the usual Western Bluebirds and Chestnut-backed Chickadees and Oak Titmice and most of the rest of the birds likely to show up in March – 48 species all told, just two down from 2021's several-year record – and all in all, yet another in Lake Merritt's unbroken stream of very good days.

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AUDUBON BIRDWALKS AT THE LAKE: Join bird expert Hilary Powers any fourth Wednesday of the month for a free "Bird walk" at the lake. Muster at the geodesic bird cage near the Nature Center at 9:30 a.m. for what are always fascinating introductions to lake birdlife.

Don't Miss Lakeside Chat #18 "Turtles in Trouble!" with featured guests Billy Tu and LMI's Own Paris Organist!

Friday May 6th 7-8 pm on Zoom, FREE.

RESISTER HERE: https://lakesidechat18_turtles-in-trouble.eventbrite.com



Lakeside Chat
Free, virtual interactive talk series, brought to you by the Rotary Nature Center Friends

Coming up:

Rotary Nature Center Friends presents Lakeside Chat # 18 => Online, FREE! Friday May 6th 7-8 p.m.

TURTLES IN TROUBLE

Did you know that nearly 60% of the 360 fresh water and sea turtle species are threatened or endangered? Turtles are not native to Lake Merritt, but they die here as a result of human ignorance.

Join us for a free online interactive presentation by two turtle conservation experts: Billy Tu, an Oakland native who studied the Southwestern Pond Turtle (*Actinemys pallida*) for his master's degree and Paris Organist, from The Lake Merritt Institute, who monitors and protects sea turtle nests and hatchlings in Baja Sur California.. What can we do to help turtles in trouble around the world? Tune in to discuss.

RESISTER HERE: https://lakesidechat18_turtles-in-trouble.eventbrite.com

or scan QR =>

Scan the code for more information.
Follow us on Instagram: @rotarynaturecenterfriends

Lakeside Chats are an online series of interactive talks sponsored by Rotary Nature Center Friends, bringing nature and people together in urban Oakland CA.

SCAN ME

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Hosted online by [Rotary Nature Center Friends](https://sites.google.com/view/rotary-nature-center-friends/home)
(<https://sites.google.com/view/rotary-nature-center-friends/home>)

THE CLIMATE CORNER: GLOBAL WARMING, SIMPLIFIED

A guest editorial by Dr. Richard Bailey

Cut through all the static about climate change, and you get to the simple fact that planetary warming is mostly driven by increases in carbon dioxide, a common greenhouse gas that exists in our atmosphere. The more there is, the warmer the planet will be. This has been shown to be true through numerous planetary cycles over millions of years. The evidence, from deep sea sediments, stalagmites, old coral reefs, multi-mile deep ice cores in our polar ice caps and from glaciers etc., is incontrovertible. When carbon levels are low, we have ice ages. When they are high, the Earth warms dramatically.

So how much carbon dioxide are we talking about? And how fast is it rising? Even more important, will we stop the increase, and if so, how?

Past and present carbon dioxide levels in ppm (parts per million):

- During an ice age 200
- Start of the industrial revolution, ~1800 280
- In 1944, (when I was born) 310
- In 2000 370
- 2020 414

Looking at recent data, it is clear that levels are now climbing at a rate of 2.2 per year.

Future levels: Because significant reductions in the use of fossil fuels have been minimal due to court decisions, politics, international trends, ignorance, complacency and inability, we can use an increase of 2.2/year to predict minimum future levels. This creates conservative estimates because the rate of increase is increasing.

- 2030 436
- 2050 480
- 2100 590

What would be a safe level?

Atmospheric CO₂ levels of between 280 and 350 created the climate that let humanity build and feed the modern world. The farther we get from those levels, the more we run the risk of disturbing that balance (1). We have already greatly exceeded this level, causing average global temperature increases of about 2 degrees F. You may not think this is much, but compare how your body feels at 98.6 degrees (normal) and 100.6 degrees when you have a fever. The Earth now has a fever.

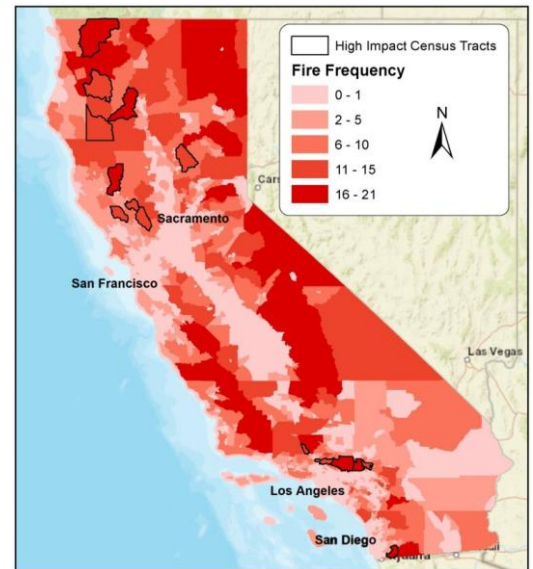
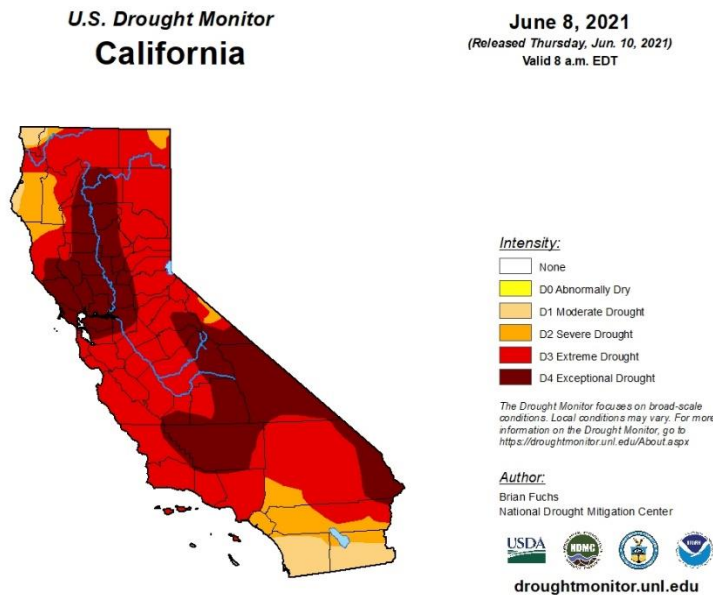
What would it be like at 500?

At 500 ppm, sometime around the year 2060, the temperature increase will be about 5.4 degrees, about twice what has happened already. This does not mean that climate disasters would be only twice what we have now because the damage is compounded, and increases at a far higher rate.

The year 2060 is only 38 years away. Think ahead to how old you, your children and grandchildren will be then. Do you, or they, want to experience worse wild fires than we are now seeing? Or continually increasing utility rates as they desperately try to bury the grid and keep from going bankrupt? Or more and more taxes as governments try to repair the storm, flood and sea level rise damages that are already happening? Or worries

that there will not be enough water? You might think you and your children can move to somewhere safer. But everywhere, every place, will suffer some consequences of 500 (2).

Everyone, even the wealthy, will be affected. The poor, much more so.



So, when you read that a price needs to be put on carbon, and you don't want that, compare it to the costs you and yours will suffer from 500 in 2060. It is not that far way.

(1) <https://climate.mit.edu/ask-mit/what-ideal-level-carbon-dioxide-atmosphere-human-life>
<https://www.latimes.com/world-nation/story/2021-07-21/extreme-weather-worldwide-climate-change-disasters>

Community Water Quality Report – Dissolved Oxygen Low at Lake Center



Water quality was measured the from Lake Merritt Boating Center dock and from kayaks and pedalboats on April 9th at the Lake Center by students from ACHIEVE at 11:30 a.m.

Depth 2.5 meters; Water Clarity n/a

Temperature: 13 degrees Celsius (degC) at the top (55 degrees Fahrenheit)/8 degrees Celsius at the bottom (46 deg Fahrenheit)
NORMAL for season

Salinity 30 parts per thousand (ppt) top/33 ppt bottom)

pH: 7 at the top/7.5 at the

bottom NORMAL

Dissolved Oxygen 9 parts per million (ppm) at the top/4.5 ppm at the bottom. (Below EPA standards at the bottom).

ACHIEVE high school students pedal boat out to mid-lake at right.
Tide Gate Status - Gates were open



Photo by Rotary Nature Center Friends

THE LAKE MERRITT INSTITUTE POSTS OUTSTANDING INCREASE IN MEMBERSHIPS AND DONATIONS

This year, despite pandemic challenges and a homeless encampment problem that won't go away, LMI topped records in previous years for subscriptions and donations. The average donation in the first quarter of 2022 was \$195. Average paid subscribers jumped from 118 in 2014 to 157 in 2021.

This shows that people really do value the lake and the work we do to keep it clean for everyone including the wildlife. LMI continues to enjoy the leadership of Executive Director James Robinson, has an expanded and dynamic Board of Directors with a new Volunteer Representative, and a growing staff and crew of loyal volunteers. LMI has reached out to schools and average community members through tabling, news interviews and our newsletter. We approach our contract year 2022 with enthusiasm for what we do and for the beautiful city we serve.

TIME TO MAKE A CHARITABLE DONATION TO THE LAKE MERRITT INSTITUTE

The Lake Merritt Institute is a 501(c)3 non-profit charity, founded in 1992. We educate the public about urban runoff and involve them in solving that problem. Result: Volunteers remove [thousands of gallons](#) of trash each year that would otherwise increase the world ocean's plastics crisis *and* Oakland's regulatory liability for water quality. You can pick up a membership application at our Farmer's Market table, or download it at lakemerrittinstitute.org.



Do you want to help the community and get regular exercise? -- CLEAN THE LAKE! Contact LMI's Executive Director James Robinson at lmi@netwiz.net or call the LMI office at (510) 238-2290 and leave a message. James will arrange for your training in safety protocols by an experienced A-Team volunteer.

If you would like to bring a group of volunteers or use the U-Clean-It stations independently, contact James at lmi@netwiz.net and leave a message so that he can explain our public health policy for volunteering and assist you in proper training to participate in the Clean Lake Program.



Photo at left taken by Adrian Cotter on April 15th shows completely open west passage, or discharge channel, at the Flood Control Station. The trash racks and the tide gates themselves are being removed sequentially for cleaning and resurfacing.

Please direct questions and comments to The Tidings Editor, Katie Noonan, at ktnoon@aol.com.

"The Tidings" is published by the Lake Merritt Institute (LMI) entirely with private funding donated to LMI, and not with funds from the City of Oakland. To contribute to LMI, use PayPal at the LMI website (lakemerrittinstitute.org) or send a check to: Lake Merritt Institute, 568 Bellevue Ave., Oakland, CA 94610-5026. LMI is a California State non-profit corporation; IRS Code 501(c)(3): EIN 94-3214160