

THE TIDINGS



LAKE MERRITT INSTITUTE

568 Bellevue Ave., Oakland, CA 94610-5026; (510) 238-2290; lmi@netwiz.net; www.lakemerrittinstitute.org
A community based, non-profit corporation, established 1995; IRS Code 501(c)(3); EIN 94-3214160

VOLUME XXVI

HOLIDAY ISSUE 2021

ISSUE XI-XII

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

WISHING HOLIDAY PEACE – from the LAKE MERRITT INSTITUTE

Where the pickleweed grows...



12th Street Tidal Marsh 9/2021. Photo by K. Noonan

Nature marches on in our urban wetlands in spite of turmoil in the world of humans.

At left, the Measure DD Tidal Marsh at 12th St. established in 2011 has suffered damage from encampments, trash, drought and perhaps will be from a plan to reduce tidal flows (see article below). Yet it continues to mature with tidal channeling and expansion of native plants getting a little help from the Weed Warriors, other local tide marsh enthusiasts, and Measure DD: looking beautiful in the golden winter sun. LMI volunteers have been concentrating on the Channel lately.

Local naturalist Peggy Rehm captured this beautiful [video](#) of the shark swimming.

Smoothhound sharks are native to San Francisco Bay and favor shallow estuary lagoons like Lake Merritt. They eat fish. How privileged we are to see ocean life like this in the heart of the city! See [Lakeside Chats #8 and #11](#) for more discussion of the benefits of marsh restoration.



TIME TO MAKE A CHARITABLE DONATION TO THE LAKE MERRITT

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.

LMI is funded by the City of Oakland and by donations from caring people like you. Help us preserve our beautiful and hard-working lake in the heart of downtown Oakland. You can pick up a membership application at our Farmer’s Market table, or download it at lakemerrittinstitute.org.

LMI in October: 7,170 gallons of trash removed from the lake by staff and volunteers in November.

Total trash collected to date in 2021 is **61,280 gallons**. 45 used hypodermic syringes were removed.

LMI Director James Robinson hosted **187 volunteers**, and gave 3 presentations.

0.98 inches of rain recorded recorded by LMI rain gauge

THANK YOU TO OUR NOVEMBER and DECEMBER VOLUNTEERS! We appreciate your efforts and community spirit. Great Job! Volunteer groups: Achieve, Park Day School 5th grade classes, MudLab, Rotary Nature Center Friends, YouthWorks, Alameda County IT, Head-Royce students, our U-Clean-It self-organized teams, 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!



REDUCED TIDAL FLOWS PROPOSED - By Dr. Richard Bailey

On most days, tidal levels in Lake Merritt vary naturally between 2.0 and 5.0 feet. A draft report dated November, 2020 by Wood Rogers, Inc. proposes to limit tidal heights in Lake Merritt to between 3.2 and 4.2 feet, but only during the daytime, and only during the dry season. This would be a marked reduction in tidal flushing to our urban estuary, which is already challenged by low oxygen levels.

Why has this recommendation been made to the City of Oakland and to the Alameda County Flood Control District, which manages the tide gates that control water levels?

While not stated outright, the restricted tide levels appear to be designed to prevent us from seeing mud flats along the shoreline when levels are below 3.2 feet. The apparent assumption is that Oaklanders do not like mud flats, which (it can be argued) are unsightly and smelly. But this decision should be made by those that use the Lake, not handed down to them without discussion. In fact, there are many reasons why mud flats are a valuable part of the estuary ecosystem. First and foremost, air contains about 21% oxygen, while water is lucky if it has 0.5%, so air in contact with the mud is about 40 times more effective in transferring oxygen compared to water, and remember, Lake Merritt is listed by EPA as an impaired body of water due to low oxygen.



*Healthy mud flats
can support life.*



A second reason for preventing levels below 3.2 feet is for boating. However, except for near the shoreline, Lake levels are adequate for boating even at naturally low tides. This is in part because the Lake has been dredged several times in the last century (<https://lakemerrittinstitute.org/detailed-evaluations/>).

The stated reason that levels should not exceed 4.2 feet is pedestrian safety (the chance of drowning if you fall in). As anyone knows who spends time at the Lake, all you have to do to avoid drowning if you fall in is sit up. This is true even when tide levels are high. I have walked in the water along 98% of the shoreline and never drowned. The recommendation in the report for allowing deeper levels at night is confusing. Can people not drown at night?

What controls should be placed on Lake Merritt tidal flows? One of the principal purposes of Bond Measure DD as passed by Oakland voters was to improve tidal exchange/circulation/fluctuation. This was done by removal of bottlenecks at 10th and 12th Streets along the channel. Thank you. But if we are to be successful in recent wetland restoration efforts, and have as healthy an estuary as possible within the limits of flood control, we need as natural as possible tidal flows, both during the day, and at night. Ideally, tidal flows should be unimpeded (tidal gates on

both sides of the channel open) except to prevent levels higher than 5.5 feet. Higher than this would flood the docks at the Boating Center.

Tide gate operations during wet weather (when rains can cause floods) was not covered by the draft report. However, existing operations and flood control district policies need to be more publicly illuminated, and evaluated in conjunction with other measures such as the previously proposed and tested aeration bubbler system, to establish as healthy and safe Lake as possible.

Tidal flows, oxygen, flood risk, and estuary health are complex issues. To further evaluate the proposed recommendations, the Measure DD Community Coalition agreed to establish a sub-committee to evaluate these issues, and make recommendations.

Community Water Quality Report – No more rain.... back to salty



Water quality was measured November 20th at the Lake Merritt Boating Center dock by Students from Oakland Technical High School at 11:45 a.m.

Depth 1.75 meters; Water Clarity >175 centimeters (Secchi Depth) Clear (Normal)

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

Dissolved Oxygen 6 parts per million (ppm) at the top/5 ppm at the bottom. (Meets EPA standards).

Salinity 32 parts per thousand (ppt) top/32 ppt bottom) NORMAL

pH: 7.5 at the top/7.5 at the bottom NORMAL

Salinity was measured by Oakland Tech student volunteer. Photo by Rotary Nature Center Friends

JANUARY'S LAKESIDE CHAT #14 – The Lake's Most Famous Animal!

with Dr. Jim Carlton

Friday, January 7th, 7- 8 pm. Free, Online

“First discovered in Lake Merritt 100 years ago, the brackish-water tubeworm *Ficopomatus enigmaticus* (known before the 1980s to Lake naturalists as *Mercierella enigmatica*) has a long and fascinating global history. Today the Lake Merritt tubeworm is also found in Europe, the North American Atlantic coast, Argentina, South Africa, Australia, Hawaii, and elsewhere. Lakeside Chat #14, sponsored by Rotary Nature Center Friends, will explore some of the scientific techniques that have been used to explore out where its (probable) original home port was.”



Register [HERE](https://lakeside-chat-14-the-lakes-most-famous-animal.eventbrite.com): <https://lakeside-chat-14-the-lakes-most-famous-animal.eventbrite.com>

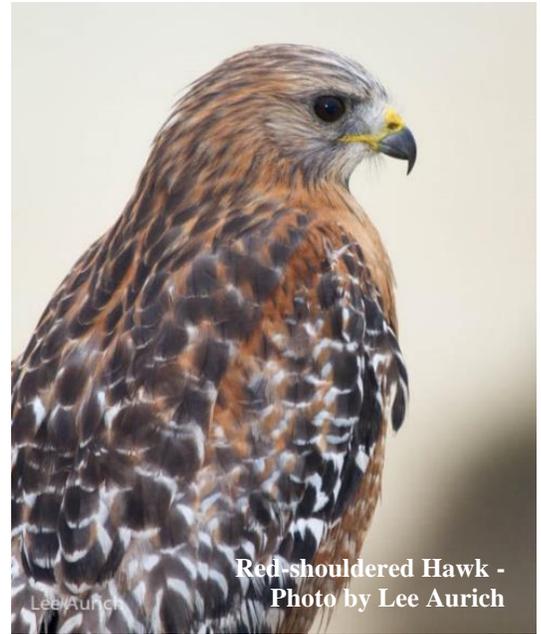
Clay Anderson's virtual bird walk on Lakeside Chats, Winter Birds@Lake Merritt will be available for viewing soon at: <https://youtube.com/playlist?list=PL8zoh5C35Fbwo9s-czz1UXI7-L3wKIbEf>

You can also see previous Lakeside Chats re-broadcast on KTOP Channel 10 at 6 pm on Sundays. KTOP is aired throughout Oakland on Comcast Cable TV Channel 10 and is also available on CH 99 on AT&T U-Verse. Link: <https://www.oaklandca.gov/services/ktop-tv10-program-schedule>

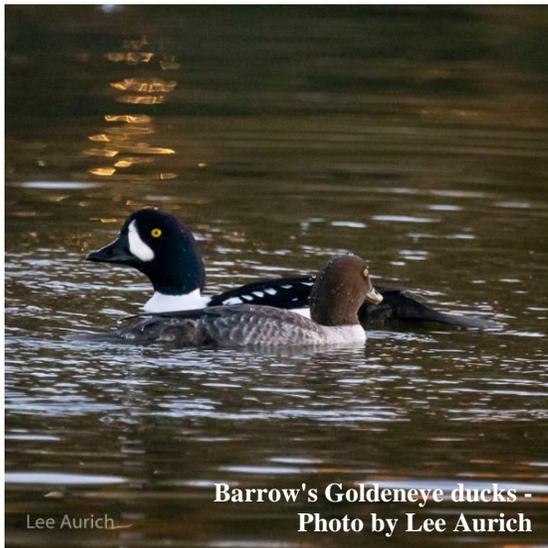
Hawks Chasing Hawks at Lake Merritt – by Hilary Powers – Golden Gate Audubon

The November Golden Gate Audubon 4th-Wednesday walk got off to a rousing start with three raptors in one tree: two juvenile Red-shouldered Hawks landed among bare branches, play-fighting and dropping out and back in again. An equally juvenile Redtail landed above them and looked on – haughtily, to the human observer’s eye. What was really happening? None of the 25 birders assembled for the event had any idea.

Strolling down the lake after the hawks flew off, we saw the full list of winter ducks: Both Greater and Lesser Scaup (with, unfortunately, no Tufted Duck among them, though one female has been seen at the lake several times this season), lots of Canvasbacks and (non-ruddy) Ruddy Ducks and Bufflehead, along with several pairs of Common Goldeneyes, the males with their clear full-moon cheek marks. Down by El Embarcadero, we found a fine pair of the much rarer Barrow’s Goldeneyes, recognizable by assorted subtle differences and the bright white crescent moons on the face of the male. The duck rafts also included several Pied-billed Grebes (their triangular bills resolutely un-pied) and a few earless Eared Grebes, but no Horned Grebes despite one having been present the afternoon before. (“Raft” being the technical term for a bunch of birds floating in a limited patch of water – not just a flock, but a flock in a specific kind of space, not necessarily the same kind of bird but all doing the same sort of thing.)



Red-shouldered Hawk -
Photo by Lee Aurich



Barrow's Goldeneye ducks -
Photo by Lee Aurich

We also picked up four of the heron-type regulars: Great and Snowy Egrets, Great Blue Herons, and Black-crowned Night-Herons (both gray-suited adults and streaky brown juveniles). Only the Green Herons stayed out of sight, despite much searching along the rocky borders of the islands. We haven’t seen one since August, but they’re surely there: like trees, islands have far more “other side” than “this side,” the only one we can see.

The quality of the lake, or at least its continuing fishy bounty, was illustrated by several American White Pelicans, some lounging, others pursuing brunch. A party of a dozen or so Double-crested Cormorants – all bronzy juveniles – also engaged in serious fish-herding. Gulls were out in force too, including one Glaucous-winged Gull (notable for back, wings, and wing-tips all one silvery gray tone) and one newly named Short-billed Gull, the mild-faced, kittenish little creature we’ve called a Mew Gull for years whenever

they appeared at the lake, which isn’t often. (Rarely more than a few times a year, and many years not at all.)

We spent so long on the lake shore that it was almost noon when we crossed Bellevue to look for tree birds, so the rest of this report is hearsay – it was the day before Thanksgiving, I had a train to catch, and my ability to seek birds among branches suddenly dropped to zero. Others in the party reported another half-dozen species or so, including most of the ones to be expected this month – plus Western Bluebirds, which we’d never seen in November before. (That leaves December as the only bluebird-less month for the trip; perhaps 2021 will be the year to, well, not quite complete the set as we missed them this past October, but at least fill in the gap on the chart.)

All told, the group reported seeing 45 species, good for November (only one down from its recent top total), and a fine time was had by all. Which is only to be expected at Lake Merritt, where every day offers a fine time to all, but especially in late Autumn with the wonders of winter birding beginning to unfold all round.

*** **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.

THE CLIMATE CORNER: – THE YEAR IN REVIEW

– A guest editorial by Dr. Richard Bailey

The year is almost gone. A year marked by COVID ups and downs, severe political and cultural divisions, and in the shadows, but looming over us all:

- The atmospheric level of carbon dioxide rose to 415; ten years ago, it was 391. CO₂ is the Earth’s thermostat.
- The most severe heat wave in the history of the Pacific Northwest obliterated scores of long-standing records in both the U.S. and Canada. It was [historic, dangerous, prolonged and unprecedented](#).
- Normally cool British Columbia, Canada suffered an all-time record heat of 121 °F, in June.
- Areas east of Vancouver got a month’s worth of rain in two days in November. And more rain is on the way in December.
- Some parts of Europe experienced more rain in a single day than they would typically expect in a whole month. Floods affected several [river basins](#) across Europe including [Austria](#), [Belgium](#), [Croatia](#), [Germany](#), [Italy](#), [Luxembourg](#), the [Netherlands](#), and [Switzerland](#).
- July and August in 2021 saw many floods occurring at similar times, with flooding also occurring in [Turkey](#), [China](#), [India](#), [Afghanistan](#), [Pakistan](#), the [United States](#), and [New Zealand](#).
- Over 3 million acres of California burned.
- Russia’s wild fires were the largest in recorded history, burning an area the size of Greece.
- In February, temperatures dropped to 8.6 degrees F in some areas of Texas, causing widespread electricity cuts. The unprecedented deep freeze led to the deaths of hundreds of Texans and left millions in the dark for days.
- Back-to-back hurricanes -- Henri and Ida -- slammed the Northeast, breaking all-time rainfall records.
- The federal government in August [declared a water shortage on the Colorado River](#) for the first time, triggering mandatory water consumption cuts for states in the Southwest beginning in 2022. *It wasn’t much better in 2020. What will 2022 be?*



For an excellent summary of what happened at the Council of Parties (COP) attempts to unify the world, read: <https://johnenglander.net/cop26-climate-conference-success-or-failure/?unapproved=3447&moderation-hash=177d97ade47d7aed44b508cdfc956cc0#comment-3447>

As John Englander says: “To put this simply from my perspective:

We are really headed for an epic disaster not only [environmentally](#), but also [economically](#), and in terms of [equity](#) for those least able to cope with a crisis that they did not cause.

“We” (the world) must agree to “put a price on carbon” to reduce greenhouse gas emissions, even more aggressively than proposed in this latest agreement.

Yet, even if we find a hoped-for, fantastical magic technologic success, we are not soon going to reverse the effects of the excess heat already stored in the sea. As readers of my book know, every second of the day, “24/7” we are adding the

equivalent of five atomic bombs of energy to the oceans. That heat is causing the changing weather patterns, the effects in the sea and on land, and melting the glaciers and ice sheets at the poles, which is just starting to cause noticeable sea level rise. Moving to higher ground will be inevitable as sea level heads towards far higher, to levels never before seen by human civilization.”

If that’s not enough to make you make a new year’s resolution to lobby for a price on carbon pollution, I don’t know what is. So, give yourself and the world a gift: send a tweet* to Senate Republicans asking them to put a price on carbon, with a dividend rebated back to everyone.

*The most common way congressional representatives communicate is by tweeting. And, they cannot block your tweet for not living in their district because the tweet does not identify where you are from.

JOIN US! - THE CLEAN LAKE PROGRAM IS OPEN!

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.



MudLab 2nd Saturday Volunteers



Oakland Tech High School Volunteers



Park Day School Volunteers



MudLab volunteer removes plastic cup – use your own re-usable cups please!

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



What can YOU do to protect the environment at Lake Merritt for people and wildlife? As a community member who uses the lake, you can model environmentally responsible behavior and report problems to **OAK311**. YOU can join forces with other caring community members like you and become a member of **The Lake Merritt Institute (LMI)**. Volunteer for weekly lake clean-ups (email Executive Director James Robinson at lmi@netwiz.net) or make a tax-exempt charitable donation to LMI to support our work. Use the membership and donation form at the end of this newsletter or visit lakemerrittinstitute.org.

Above, a great egret surveys a calm and clean lake. Photo by Bradley Skaught.



Please fill out this form and mail to:

The Lake Merritt Institute – New Member
 568 Bellevue Avenue
 Oakland, CA 94610

All contributions are tax deductible and support Institute programs.

name: _____

address: _____

city, state, zip code: _____

e-mail: _____

Membership level – choose one

\$35 Cormorant (newsletter available via electronic mail only at this level)

The following membership levels include **either** email newsletter, **or** paper copy via US mail

Please circle your preference: email or US Mail

\$50 Snowy Egret

\$50 Blue Heron

\$100 Business/Swan

\$250 Leopard Shark

\$500 Striped Bass

\$1000 Least Tern