



Ecomusicology: Exploring our Environment through Sound
St. Stephen's Episcopal Church
in cooperation with
The Estuary and Ocean Science Center, Romberg Campus
Sunday, April 21, 2024; 4:00 p.m.

Welcome to today's concert

Thank you for joining us today for our concert that explores the field of ecomusicology on this, the cusp of Earth Day. For decades, the Episcopal Church has been actively involved in the care of creation- although certainly we believe that we have been called from the beginning to care for all creatures, the seas and the stars, and all that dwell therein. As a community of faith worldwide, we have examined the ways that we have been wasteful of our resources and pledged to do better and do more to preserve the world we live in. As the Episcopal Church has said, we “have developed covenants and promises to adopt practical ways of reducing our climate impact and living more humbly and gently on Earth as individuals, households, congregations, institutions, and dioceses”.



Ten years ago, a solar array was installed on the roof of Kimball Hall here at St. Stephen's as a testament to this initiative, and today we are very grateful to partner with the Estuary and Ocean Science (EOS) Center to highlight, through music and song, all the very different ways that we have been graced by the ecology that has sustained us and with this concert, a continued pledge to advance different ways of using our resources mindfully.

The Rev. Kyle Dice Seage
Rector, St. Stephen's Episcopal Church



On behalf of the musicians performing today, the scientists sharing their research with us, and the sound engineers transporting us worlds away, thank you for making this event part of your Earth Day celebrations and observances. In my short time at St. Stephen's, I've found this community to be one that views music as an important tool with which to think, as a means of expressing big ideas, and as a vehicle to help us make sense of the world in profound ways that we can't replicate through other means. If this is your first time here, please know how honored we are to have you with us, and hope you feel welcome to visit again soon and often.

In thinking about the various strands that comprise our event today, *ecomusicology* came to mind first and most persistently. My training is in musicology, and ecomusicology is a sub-discipline, existing much in the same plane as Ecology does in the natural sciences- to study the behavioral patterns of ecosystems and networks, but through the investigation of sound and music. Ecomusicology considers music's role on and in the environment, investigating and advocating for sustainable practices in the production of musical instruments, for example. Ecomusicology also examines the way music can be used as a vehicle for describing the natural world, as an advocate for conservation efforts, and the way that organized and unorganized sounds affect plant, hydrological, and animal habitats. As you take in the sounds and sights today, we hope for an even greater appreciation for this pairing of the arts and sciences at work in the world. Please do plan to join us in the adjacent Parish Hall following the program, where a captivating sound installation and collection of research presentations by members of the EOS Center research community awaits.



Dr. Brad Schultz
Music Minister, St. Stephen's Episcopal Church



Donations received at the door and online via the QR code today will fund the important work of the Estuary and Ocean Science Center at the Romberg Tiburon Campus. Thank you for your generosity!

The Program

Presented without pause. Please withhold applause until the conclusion

Welcome		Rev. Kyle Dice Seage Dr. Carmen Domingo
Jesus Christ, the Apple Tree	Kathryn Wagner & Judith Ward, soloists	Elizabeth Poston Arr. Dorothy Papadakos
Water Music Suite: Hamburger Ebb und Fluth		Georg Philipp Telemann trans. Curt Oliver
Harlequinade		
Sarabande		
Bourrée		
Gigue		
Eel River Chant		Meredith Buck
Water Music Suite		Georg Frideric Handel arr. James Guthrie
Air		
Bourrée		
Minuet		
Rigaudon		
Animal Crackers		music: Eric Whitacre text: Ogden Nash
The Panther		
The Cow		
The Firefly		
The Seasons, Op. 37b		Pyotr Ilych Tchaikovsky arr. Alexander Goedicke
May Nights		
Sounds of the EOS Center		Anne Simonis Corryn Knapp
“It’s Pure Joy”		Gretchen Lang
Sacred Place		Alex Berko
Opening Prayer		
Amidah		
Shema		
Mi Shebeirach		
Kaddish		
Closing Prayer		

Following the program,
please join us for a soundscape and research poster presentation in Kimball Hall
with refreshments in the Courtyard.

Notes

Settings of the poem “**Jesus Christ the Apple Tree**” most often appear at Christmastime, and Elizabeth Poston’s setting perhaps most frequently of all, here expanded and reimagined for solo voices by organist Dorothy Papadakos. Aside from the biblical metaphors, the song’s popularity at Christmas comes from the old English tradition of wassailing (literally “good health”). While the practice of wassailing typically involves groups of merry-makers going from house to house with a wassail bowl, singing traditional songs and spreading good wishes, the form of wassailing often practiced in the English countryside is noisier yet. Generally, a wassail King and Queen lead the assembled group of farmers, farm workers and villagers in a procession from one apple orchard to the next, where they gather around the biggest trees and place a piece of wassail-soaked toast into the branches- singing, shouting, banging pots and pans, and even firing shotguns along the way in attempt to waken the sleeping tree spirits and to frighten off any evil demons that may be lurking in the branches.

Georg Philipp Telemann’s ***Water Music Suite*** is perhaps the lesser known of the two heard today. In contrast to Handel’s piece, however, Telemann’s movements are meant to be about the water, in this case, the River Elbe in Hamburg, Germany. Each movement is further connected to a mythological association: the Harlequinade for joking Triton, and the Sarabande for sleeping Thetis (who wakes in the Bourrée). Though Telemann was among the most prolific composers of the German Baroque, he is generally only known for his connections to other musicians. He knew both J.S. Bach and Handel personally. Bach named his son, Carl Philipp Emanuel after Telemann. Telemann was even the first choice of the Leipzig town council in 1722 for the role of Thomaskantor, but after authorities in Hamburg offered Telemann a raise to stay, the Leipzig position went to Bach. *Water Music* was written in April of 1723 for the Hamburg College of the Admiralty. There are a total of ten movements, four of them heard today.

George Frideric Handel’s ***Water Music Suite*** premiered on the 17th of July, 1717 (7/17/1717) in response to King George I’s request for a concert on the River Thames. Newspaper accounts of the event in *The Daily Courant* describe a scene where a whole manner of boats covered the Thames for the occasion, and a barge carrying fifty or so performing musicians took advantage of the rising tide to propel themselves from Lambeth to Chelsea without rowing. There a lavish dinner was served before returning back the same way. The original version of the suites, which contain some eighteen movements presented in no fixed order, was scored specifically for instruments that would fare well outside and on the water. As such, the harpsichord heard in today’s performance was not a part of the original performance on the water, but was added later.

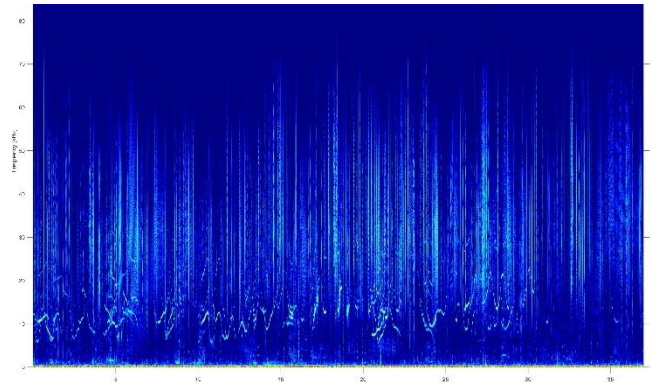


A 2009 revival of the 1717 premiere performance of Handel’s *Water Music* on the River Thames in London.

The poetry of **Ogden Nash** probably needs no introduction, and no program about the environment would be complete without giving his work a mention. In addition to his humorous poetry heard here, and his poems meant to accompany performances of the Camille Saint-Saens *Carnival of the Animals*, Nash offered plenty of commentary on the environment throughout his career. In a twist on the poem “Trees” by Joyce Kilmer, which contains, “I think that I shall never see...a poem lovely as a tree,” Nash replied with, “Indeed, unless the billboards fall...I’ll never see a tree at all.”

Tchaikovsky's *The Seasons* was originally a set of twelve short character pieces for solo piano, though it is often now heard in orchestral and other arrangements, including the trio heard today. Poetry accompanies each of the twelve movements for the twelve months of the year. For May, an excerpt from poet Afanasy Afanasyevich Fet: "What a night! What bliss all about! I thank my native north country! From the kingdom of ice, from the kingdom of snowstorms and snow, how fresh and clean May flies in!"

The *Sounds of the EOS Center* includes a montage of three recordings from adjunct professor Anne Simonis and graduate student Corryn Knapp. The first and third samples heard come from the project "Adrift in the California Current: Studying marine mammals and ocean soundscape using drifting recordings," a combined effort between the EOS center and NOAA involving buoys that can be released into the ocean where they drift along ocean currents for weeks at a time. These buoys have multiple hydrophones suspended below the surface, which collect high quality recordings of the sounds in marine ecosystems. The buoys are small and easy to work with, and can be deployed throughout the California Current Ecosystem, allowing researchers to collect more data to study the potential impacts of offshore wind energy development on protected species along the West Coast. The second sample comes from the San Francisco Marina Eco-Engineered Seawall Project, located on the Bay between Fort Mason and Chrissy Field. Corryn can be heard moving supplies and explaining the project to passersby. This project is testing new materials and design for seawalls which promote biodiversity, while also protecting coastlines against threats from seismic activity and rising sea levels.



Sometimes visual representations of sound are every bit as useful. This spectrogram shows the dolphin sounds heard in the third portion of the recording montage.

Alex Berko was commissioned to write *Sacred Place* by Conspirare and conductor Craig Hella Johnson, who premiered the piece in March of 2023. The composer states that *Sacred Place* is an ecological service that connects the old with the new, the sacred with the secular, and the individual with the community. The outline of the six movements is a Jewish service, though texts of Jewish prayers are substituted instead for those of various writers and thinkers who speak of the environment as a place of safety, comfort, and beauty. The Opening and Closing Prayer use the same Wendell Barry passage from the poem "The Porch over the River." *Amidah* (to stand) uses snippets of a letter written by John Muir to Theodore Roosevelt asking him to meet at Yosemite National Park. Muir pleads with Roosevelt to "stand" with him in preserving this land. *Shema* (to listen) uses a poem by William Stafford who urges us to listen to what the earth is saying. *Mi Shebeirach* (a prayer for the sick) is the English translation of the Hebrew prayer. Often an emotional peak of the Jewish service, it asks those gathered to pray for those in healing. Berko's view of this movement is of one that calls us to action as inhabitants of the earth to do our part to heal it. *Kaddish* (a prayer for the dead) uses a short line from the Bengali writer Rabindranath Tagore that speaks of the sunset as a metaphor for remembering those who are no longer with us.

From the composer: "the title *Sacred Place* holds many meanings. Each writer that I have chosen views the earth as sacred. They speak of us as inhabitants, as visitors. Without the earth, there is no us...I find it beautiful that the audience will be entering one sacred space with its own history and traditions and experiencing elements of another culture's service. There is a deep, unifying power in collective listening that transcends a single person or a single group's traditions. I am thinking about the concept of the "service" in the broadest sense: coming together to sit, listen, breathe, and understand. The audience is entering a sacred space within themselves, silently resonating with those around them."

Participants

Violin: Michael Grossman
Cello: Miriam Perkoff
Piano: Paul Smith
Conductor: Brad Schultz

Speakers: Rev. Kyle Seage; Rector, St. Stephen's Episcopal Church
Dr. Carmen Domingo; Dean of Biology, San Francisco State University
Patrick Kangrga; Minister to Children and Youth, St. Stephen's Episcopal Church
Gretchen Lang; Environmental reporter for *The Ark* Newspaper

The Choir

Soprano

Shama Alexander
*Caroline Armitage
Linda Brown
Leslie Cohl
Katie Jawetz
Jennie Taylor
Kathryn Wagner
Judith Ward

Alto

*Karen Clark
Claudia Feurey
Gretchen Lang
Larisa Lucaci
Linda McCann
Shanna Moler
Chris Mudge
Mary Schultz
Laura Wiebe

Tenor

*Chip Colvin
Jim Davenport
Ted Lynch
Tucker MacLean
Douglas Mandell

Bass

David Brown
Lance Dalzell-Piper
Jan Gullett
• Wilford Kelly
Doug Moler
Mchael Orlinsky
David Patterson
Scott Patton

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Kristin Miltner, Tremology Lab

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Satoko Boris, reception
Gretchen Lang, publicity and direction
Karen Gullett, publicity
Suzette Wilson, publicity



St. Stephen's Episcopal Church

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Selected Texts

Animal Crackers; music: Eric Whitacre, text: Ogden Nash

- I. The Panther
The panther is like a leopard
Except it hasn't been peppered.
If you behold a panther crouch
Prepare to say, "ouch."
Better yet, if called by a panther,
Don't anther.
- II. The Cow
The cow is of the bovine ilk.
One end is moo, the other, milk.
- III. The Firefly
The firefly's flame
is something for which science has no name.
I can think of nothing eerier
than flying around with an unidentified glow
on a person's posterior

Sacred Place; music: Alex Berko

I. Opening Prayer

In the dusk of the river, the wind gone,
the leaves grow still- The beautiful poise of lightness,
The heavy world pushing toward it.

- Wendell Berry
Excerpt from "The Porch Over the River"

II. Amidah

"How softly these mountain rocks are adorned, and
how fine and reassuring the company they keep- their
brows in the sky, their feet set in groves and gay
emerald meadows, a thousand flowers leaning
confidingly against their adamant bosses, while
birds bees butterflies help the river and waterfalls to
stir all the air into music- things frail and fleeting and
types of permanence meeting here and blending as if
into this glorious mountain temple Nature had
gathered her choicest treasures, whether great or
small to draw her lovers into close confiding
communion with her."

- John Muir to Teddy Roosevelt
on preserving Yosemite National Park

III. Shema

The earth says have a place, be what that place
requires; hear the sound the birds imply
and see as deep as ridges go behind
each other. (Some people call their scenery flat,
their only pictures framed by what they know:
I think around them rise a riches and a loss
Too equal for their chart- but absolutely tall.)

The earth says every summer have a ranch
that's minimum: one tree, one well, a landscape
that proclaims a universe-
sermon of the hills, hallelujah mountain,
highway guided by the way the world is tilted,
reduplication of mirage, flat evening:
a kind of ritual for the wavering.

(cont'd)

The earth says where you live wear the kind
Of color that your life is (grey shirt for me)
and by listening with the same bowed head that sings
draw all things into one song, join
the sparrow on the lawn, and row that easy way,
the rage without met by the wings
within that guide you anywhere the wind blows.
Listening, I think that's what the earth says.

- William Stafford

IV. Mi Shebeirach

May the source of strength
Who blessed the ones before us
Help us find the courage
To make our lives a blessing
And let us say Amen

Bless those in need of healing
with r'fuah sh'leimah (complete healing)
The renewal of body,
The renewal of spirit
And let us say Amen

- Traditional Jewish Prayer

V. Kaddish

"Let my thoughts come to you, when I am gone,
Like the afterglow of sunset at the margin of starry
silence."

- Rabindranath Tagore, 1861-1941

VI. Closing Prayer

In the dusk of the river, the wind gone,
the leaves grow still- The beautiful poise of lightness,
The heavy world pushing toward it.

- Wendell Berry
Excerpt from "The Porch Over the River"



Vision for the future of the
ESTUARY & OCEAN SCIENCE CENTER
at the Romberg Tiburon Campus

*Re-imagining San Francisco Bay's only waterfront marine lab
as a hub for coastal and societal resilience*

There has never been a more pressing need for a bay-side integrative hub connecting science, society, and the sea. Our unique model for ocean-centered climate change solutions:

- **Launch bold initiatives to serve California and regional climate action**

Nature-based solutions institute- Create a convergence point for science-informed planning and implementation of climate change adaptation and mitigation projects in San Francisco Bay and demonstrate sea level rise resiliency techniques along our shoreline.

Conservation aquaculture center- Enhance our unique baywater system to support conservation and restoration of threatened aquatic species, especially those impacted by climate change or that can serve in climate change adaptation or mitigation.

Blue economy incubator- Provide maker spaces for marine tech advances, creating opportunities for student research and workforce training while supporting mission-aligned innovation.

- **Ignite passion and learning while growing a climate workforce**

Climate change training- Expand trans-disciplinary coursework and hands-on immersion experiences for SF State students, professionals, and community members.

Workforce pipeline- Broaden educational programs and internships for under-served youth, promoting science literacy and a pipeline to science and engineering degrees and jobs in climate action.

- **Support ecosystem and human resiliency through critical renovations**

Waterside access- Rebuild the former US Navy pier and small boat facility for transportation to our programs, emergency egress for neighbors, and access to nearby Marin County open spaces, promoting both scientific/educational pursuits and human well-being.

Onsite Housing- Renovate the US Navy barracks to dormitories and apartments, to support undergraduate and community programs and provide affordable housing to local teachers and other public service workers.

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