

ETWG eDNA Community of Practice

Description: A group to make connections, share information, and catalyze collaboration on work related to environmental DNA (eDNA) methods, tools, data handling, and resources

Purpose: The purpose of the group is to develop a community of practice for people who interested in the use of eDNA techniques in order to improve communication, share knowledge, and catalyze collaboration.

Points Of Contact: Co-Leads ~ [Jason Ferrante \(jferrante@usgs.gov\)](mailto:jferrante@usgs.gov), [Damian Menning \(dmanning@usgs.gov\)](mailto:dmanning@usgs.gov), and [Chris Merkes \(cmerkes@usgs.gov\)](mailto:cmerkes@usgs.gov).

Membership is open to anyone. If you are interested in joining this group, please fill out this form <https://listserv.usgs.gov/mailman/listinfo/cdi-edna>. We will use it to build notification and email lists.

Participants

To post to the Forums on this Wiki you will need to log in to the myUSGS Confluence site (there is a Log In option in the upper-right of the screen). Those of you in the Department of Interior will use your full email address and Active Directory password to log in. Those of you outside of the Department of Interior please request access for this CoP specifically by signing up at <https://listserv.usgs.gov/mailman/listinfo/cdi-edna> to get added to the Wiki access list. You will see an email from myUSGS Confluence with subject "[myUSGS Confluence] Account password" - please follow the directions to set your password and access the Wiki.

Members, please update your contact information in the [membership sharepoint sheet](#).

See [this page](#) for a block of member email addresses that you can cut-and-paste

Consider joining the CDI broader group! Go to <https://listserv.usgs.gov/mailman/listinfo/cdi-all> to sign up for the mailing list and get invites to the monthly meeting, annual conferences, and more.

Environmental DNA Technical Exchange Workshops

Examples of recent eDNA data releases

eDNA Webinars

Please let us know if you are aware of any other eDNA-related webinars that would be open to general participation or if you would like to host a webinar here by emailing [Jason Ferrante \(jferrante@usgs.gov\)](mailto:jferrante@usgs.gov), [Damian Menning \(dmanning@usgs.gov\)](mailto:dmanning@usgs.gov), or [Chris Merkes \(cmerkes@usgs.gov\)](mailto:cmerkes@usgs.gov)

ANNOUNCEMENTS:

- 1) We have posted a USGS Mendenhall postdoc position related to our robotic eDNA research with the Monterey Bay Aquarium Research Institute: <https://www.usgs.gov/centers/mendenhall/20-2-development-and-application-eco-genomic-indices-and-metrics-biodiversity>
- 2) The **5th Annual eDNA Technical Exchange Workshop (5eDTEW)** to be held virtually, Oct 19-21, 2021
- 3) **2nd National Workshop on Marine eDNA:** tinyurl.com/marineedna

- 4) NOAA 'omics seminar series: 3rd Wed of the month at noon EST <https://www.star.nesdis.noaa.gov/star/NOAAScienceSeminars.php>

Calendar of Events

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eDNA Community Forum

Please feel free to use the **eDNA Community Forum** to ask questions, initiate new discussions with this group, or browse the forum and comment on existing items.

Sub-forums - please contact [Jason Ferrante \(jferrante@usgs.gov\)](mailto:jferrante@usgs.gov), [Damian Menning \(dmenning@usgs.gov\)](mailto:dmenning@usgs.gov), or [Chris Merkes \(cmerkes@usgs.gov\)](mailto:cmerkes@usgs.gov) if you have an idea for starting a new Topic or Sub-forum within an existing topic.

Recent Forum Questions: Help each other out by responding to your peer's questions. Just click on the Q to be redirected to the forum.

1) **ddPCR Troubleshooting and Maintenance:** *Ashley M Spoljaric asks:* Gblocks- For those of you who use Gblocks as controls or standards in ddPCR, is there a certain length of time you use them once hydrated? Do you keep using them until they seem to have issues or hydrate a new tube even though the current one may be good if say it's been longer than 3/6 months? Do you only freeze/thaw the original stock a certain number of times? We use them a lot in our assays and typically they work really well, until one day they just don't. Then I go through troubleshooting with everything pointing to the Gblocks just "running out of steam." Just curious to hear some thoughts or if you can pinpoint a length of time they usually turn "bad" on you. Thanks

2) **Has anyone has successfully used Zymo's RNA/DNA Shield to preserve eDNA filters at room temperature...?**

USGS CDI eDNA COP Mendeley group

Please join our Mendeley Group and feel free to upload/download any eDNA papers you have/want to your personal Mendeley account.

Recent publications from our members!

1) "**Metabarcoding of environmental samples suggest wide distribution of eelgrass (*Zostera marina*) pathogens in the north Pacific**" published in Metabarcoding and Metagenomics. Available for downloading at: <https://mbmg.pensoft.net/article/62823/>. **Reference:** Menning DM, Gravley HA, Cady MN, Pepin D, Wyllie-Echeverria S, Ward DH, Talbot SL (2021) Metabarcoding of environmental samples suggest wide distribution of eelgrass (*Zostera marina*) pathogens in the north Pacific. Metabarcoding and Metagenomics 5: e62823.

2) "**Estimating the genetic diversity of Pacific salmon and trout using multigene eDNA metabarcoding**" published in Molecular Ecology. Available for downloading at <https://onlinelibrary.wiley.com/doi/10.1111/mec.15811>. **Reference:** Weitemier K, Penaluna BE, Hauck LL, Longway LJ, Garcia T, Cronn R. Estimating the genetic diversity of Pacific salmon and trout using multigene eDNA metabarcoding. *Mol Ecol.* (2021) 00:1–21.

3) "**Influence of sediment and stream transport on detecting a source of environmental DNA**" published in PLOS ONE, an open access journal. Available for downloading at <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0244086>. **Reference:** Nevers MB, Przybyla-Kelly K, Shively D, Morris CC, Dickey J & Byappanahalli MN (2021). Influence of sediment and stream transport on detecting a source of environmental DNA. *PLOS ONE* 15: e0244086.

CoP Monthly Meetings/Newsletters

A monthly Newsletter to highlight new publications, webinars/presentations, conferences, and updates from each of our Sub-Forums. **Add your 2 cents to list of agenda items and activities the community might take by [leaving a comment on the page.](#)**