**How to write an abstract for a conference**

Modified from Purdue Online Writing Lab (<https://owl.english.purdue.edu/owl/resource/656/1/>)

* Know your deadline and begin drafting your abstract early.
* Send your draft to your advisor for feedback. The abstract will move back and forth between you and your advisor 2-3 times, so send the first draft at least 1-2 weeks ahead of time.
* Know the word limit and plan accordingly.
* Have a short descriptive title. Many people only read the titles of abstracts and decide whether they want to see your presentation or not. Decide for you self, which presentation are you going to see: i) :”Wetlands in the Connecticut River Floodplain: an important carbon source?” or ii) “ Experimental assessment of aqueous soil extracts of selected wetland soil core data with fluorescence and absorbance spectroscopy in a small catchment in NE Vermont”.

**What an abstract does:**

* Communicate contents of reports
* Includes purpose, methods, scope, results, conclusions, and or recommendations
* Highlights essential points
* Are short—from a paragraph to a page or two, depending upon the length of the report (10% or less of the report)
* For a conference: this will i) help the organizers decide whether to invite you and ii) advertise your research for other conference attendees

**Qualities of a good abstract**

* Uses one or more well-developed paragraphs, which are unified, coherent, concise, and able to stand alone
* Uses an introduction-body-conclusion structure in which the parts of the report are discussed in order: purpose, findings, conclusions, recommendations
* Provides logical connections between material included
* Is intelligible to a wide audience

**Steps for writing effective report abstracts**

To write an effective report abstract, follow these steps.

1. **Make notes on the nuts and bolts of your research:**

Intro: why is your research important? What has been done already (with refs), what is a knowledge gap?

Objective: What is the objective of your research (obviously closing the knowledge gap). Formulate your objective carefully, be specific. You may also formulate a research hypothesis.

Approach/methods: what did you do? Find a way to summarize your methodology and think about where you should provide details vs. where you can generalize.

Results: summarize the most important results. Depending on the word limit you may not have more than a few sentences for this. If you only have preliminary results, say it.

Conclusion: brig this back to the big questions (why is this important). If this is preliminary data you could mention next steps.

1. **Put your draft together** not worrying to much about the prettiness of the writing yet. It may help to leave headers in for now (intro, objective etc).
2. **Revise your rough draft** to address the following
* Content: is all there? Is it correct?
* Is the abstract structured? If you typically struggle with repetition or lack of structure, try a reverse outline.
	+ Streamline: drop superfluous information, and eliminate wordiness, working towards a direct writing style.

For example you could take this sentence “ Carbon is an important soil component and is present in high amounts in soils and is therefore studied to determine carbon content” (repetition) and streamline “Soils contain important amounts of carbon and are therefore increasingly studied”.

* Check sentence level stuff: typos, syntax, etc.

4. **Send it to your advisor** knowing that revisions will be recommended, so try not to get too attached to your first draft.

Below are examples of typical conference abstract, note the first has a very long intro to make up for the fact that we didn’t yet have much results. The second had a very low word limit.

**Wetlands in the Connecticut River Floodplain: an important carbon source?**

Christine Loughlin, Julia Perdrial

Floodplains are heterogeneous landscapes with respect to soil and sediment composition and stability of sediment-associated carbon. *One important* contribution to this floodplain heterogeneity is provided by the meandering course of streams: moving water erodes the (outer) cut banks while the lower flow energy inside bend is characterized by sediment deposition (Friedkin 1945; Hooke 2013). This process gradually increases bend curvature until the stream bypasses the narrowing curves and leaves part of the original channel abandoned which then persist as oxbow lakes or swamps. Abandoned channels exhibit a very different composition and reactivity than the active channel sediment and adjacent soils: they are rich in organic matter and exhibit different biogeochemical cycling due to reducing conditions at depths. Because old channels are often hydrologically connected to the active channel, these swamp deposits are impacted by floods and can contribute to the stream metal and C load. In order to assess the concentration and characteristics of water soluble (mobile) C and metals from such wetlands, we extracted the water soluble fraction of samples from two depth profiles of wetlands in the Connecticut River Floodplain.

Double deionized water was added to air dried soils in a solid solution ratio of 1:5, placed on a shaker for 24 hours, centrifuged and filtered to separate particulate from dissolved matter. Dissolved organic and inorganic carbon as well as dissolved nitrogen concentrations were determined with a Shimadzu C analyzer. To determine character and origin of dissolved organic matter, samples were also measured with the Aqualog Fluorescence Spectrometer. Metal concentrations were measured with a Perkin Elmer ICP-OES. Results will provide important information on the contribution of meander wetlands to C and metals in the Connecticut River Floodplain and can help to make predictions for their export during flooding.

Bioavailability of carbon of a Vermont river corridor is a function of landocver

Julia N. Perdrial1, Alyson Hampsch2, Carol Adair3

River corridors (RC) represent an integral part of river systems and can, depending on hydrology and geomorphology, act both as a source of sink for riverine carbon (C). Increased intensity of precipitation will augment river discharges and lead to erosion liberating sediment-bound, terrestrial C into the aqueous system [[1](file:///C%3A%5CUsers%5Cjperdria%5CDocuments%5CConferences%5CGoldschmidt_2016%5CPerdrial_abstract_021916.doc#_ENREF_1)]. Such aqueous organic C is more bioavailable than sediment bound C and can be readily transformed into the greenhouse gas CO2 [[2](file:///C%3A%5CUsers%5Cjperdria%5CDocuments%5CConferences%5CGoldschmidt_2016%5CPerdrial_abstract_021916.doc#_ENREF_2)]. We hypothesized that amount and bioavailability of this RC carbon depends on land cover (agricultural vs. forested) and distance from the stream (stream bank vs. far stream) and use a 5th order stream in Vermont (USA) to test this hypothesis. Four representative land covers were sampled with depth including spatial and temporal replicates in summer 2015, analyzed for total and water extractable organic C and % respired C using incubations. Preliminary results indicate that the agricultural site contained the most total C but the forested site produced more WEOC. Fluvial erosion and deposition impacted near stream areas were generally low in C. Bioavailability normalized to C content was similar for all land covers. These results indicate that C characteristics vary with land cover, a metric that can be readily derived from remote sensing data allowing for assessment at greater spatial scales.

[1] Guilbert, et al. (2015) Geophysical Research Letters, **42**, 1888-1893. [2] Aitkenhead-Peterson, et al. (2003) *Aquatic Ecosystems*. 25-70.