

The SPRUCE Sample Archive - Organization, Availability, and Citation

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Overview

The SPRUCE archive at ORNL contains thousands of **pre-, mid-,** and soon to be **post-treatment samples** of all types dried or frozen (-20, -80) in various formats from whole structures and cores to homogenized subsamples.

Examples of Sample Types:

- Peat Cores
- Shrub Layer Tissues (foliar, woody, reproductive)
- Surface Moss
- Tree Tissues (needles, twigs, wood)
- Below Ground Vegetative Biomass
- Litter (decomposition)



Organization

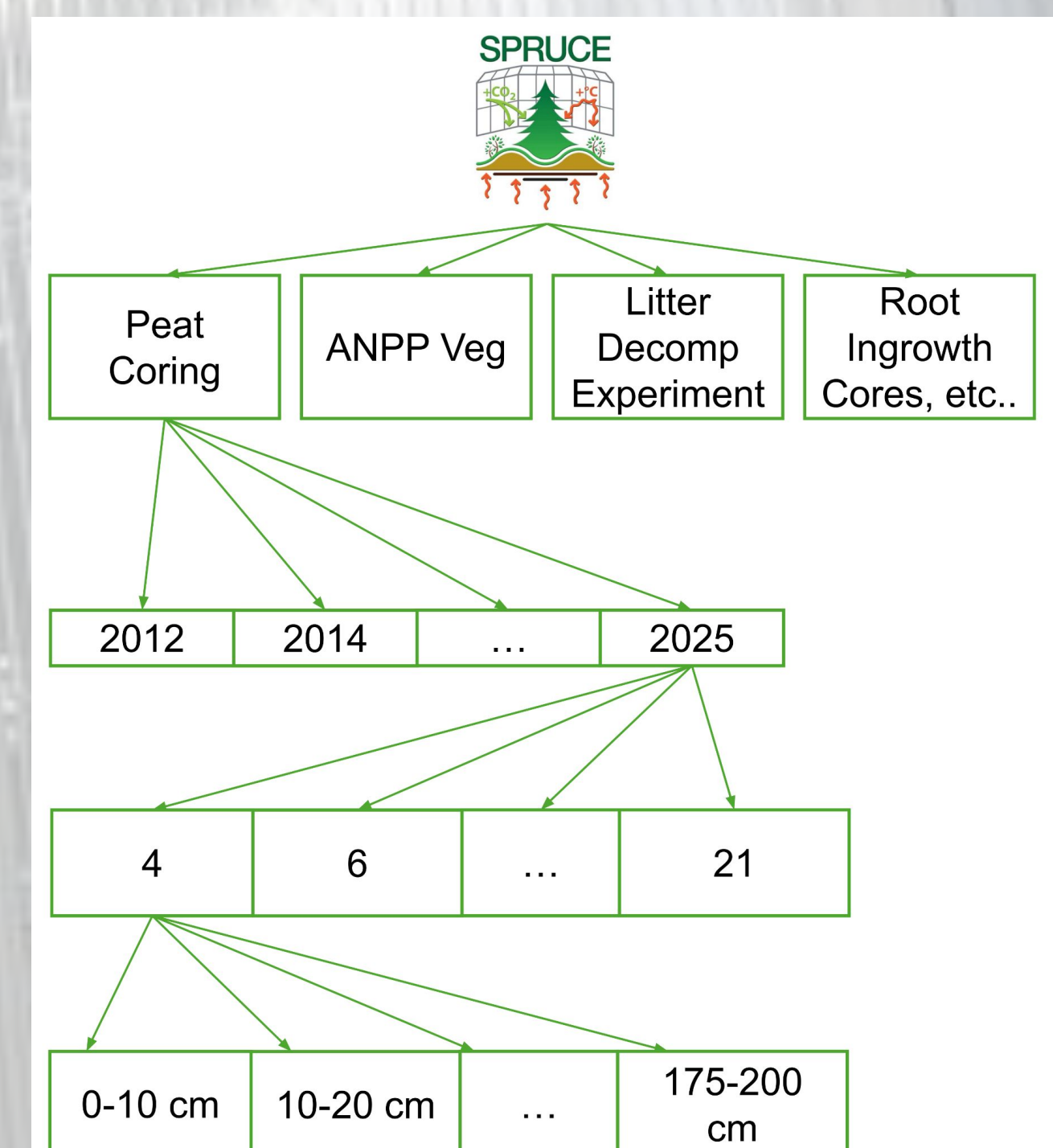
Future sampling campaigns will be fully integrated into a **sample management and archival pipeline** being developed.

Registration of sample sets and events with **IGSNs** in **SESAR²** will allow us to provide **standardized, citable, and FAIR(IE) data products** (see below) in ESS-DIVE.

Past samples are being processed into the Sample Archive with the intent of **maintaining a project database of all available samples** for further study (projected end of 2025).

These past samples will be registered to at least the campaign and, if the metadata is available and organized, down to sample.

An outline of a potential organizational structure is presented to the right. Each tier will be an IGSN object.



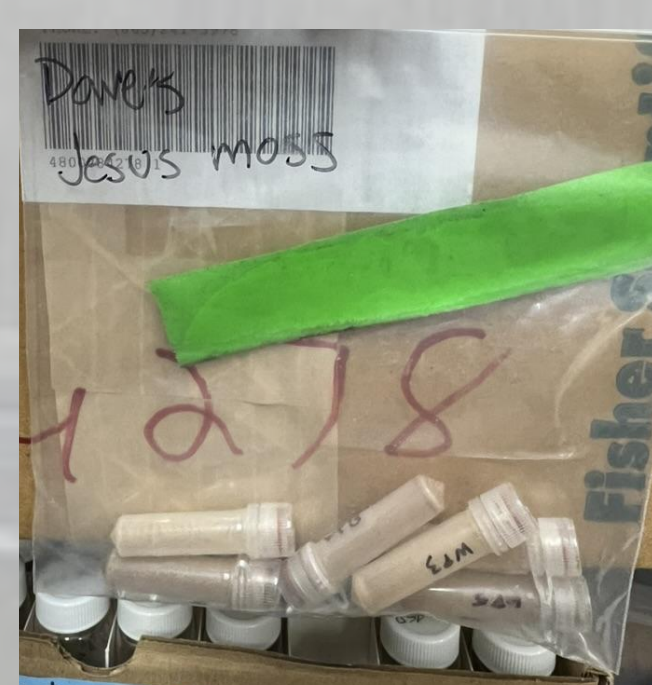
Availability of Samples

How can existing samples be utilized for research and data synthesis activities (papers and models)?

Inquire about what we have:



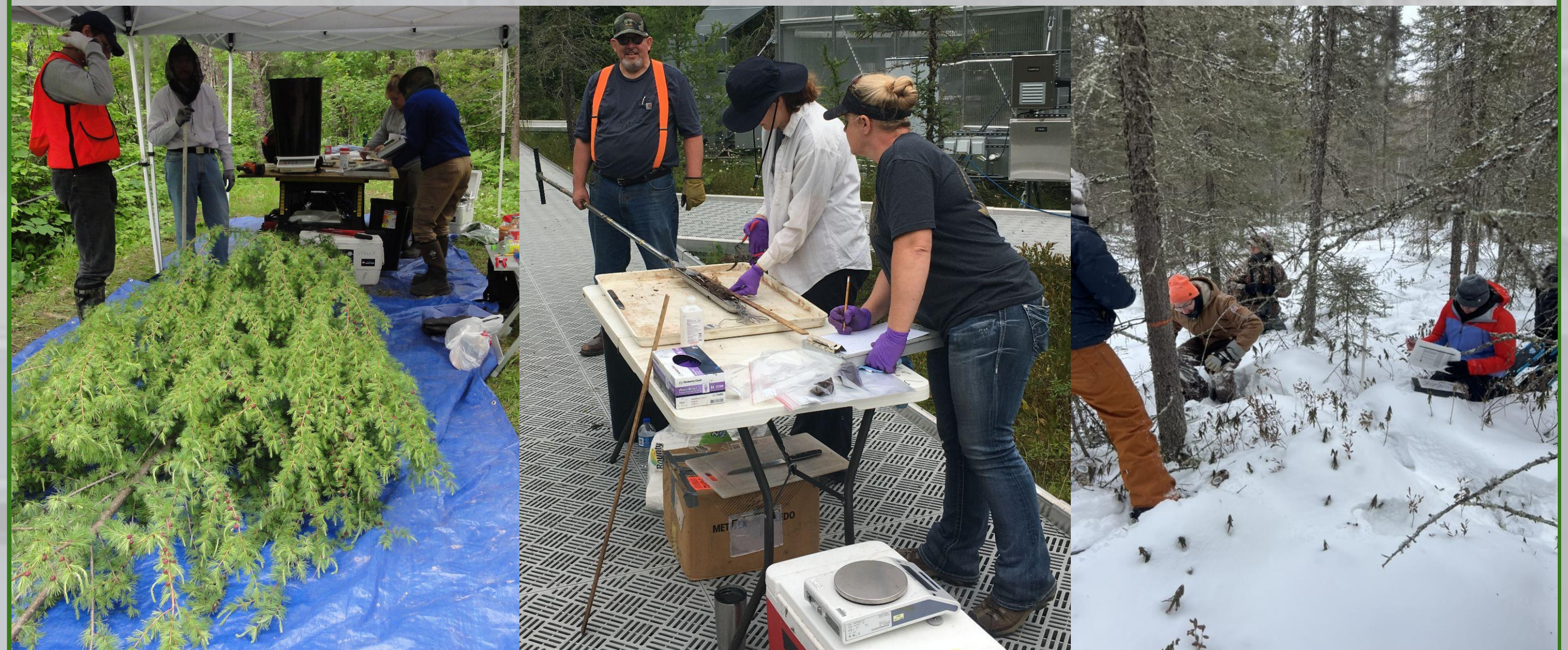
Contact us now if you have samples collected from SPRUCE that have significant reanalysis value that might be best archived at ORNL.



Citing Sample Sets

As part of our work to **make SPRUCE samples FAIR** (Findable, Accessible, Interoperable, Reusable), sample sets along with their associated metadata, are being packaged into registered in ESS-DIVE.

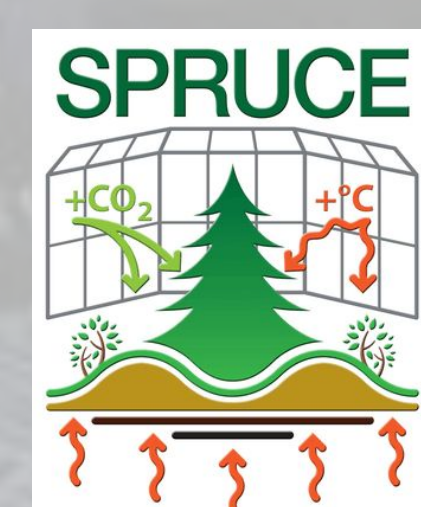
Citing an ESS-DIVE sample set simplifies publication (outsources sample collection and metadata) and ensures that attribution is inclusive and equitable (**FAIR/IE**) for all researchers, technicians, and students involved in sample collection campaigns.



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