Adding Your Program to FEMC's Northeast Inventory Network (NEFIN)

The **Northeast Inventory Network (NEFIN)** standardizes continuous forest inventory (CFI) data so that it can be compared and analyzed alongside other CFI datasets across the region—even if each program collects data differently. By contributing your data to NEFIN, you will:

- **Increase accessibility:** Your CFI data will be discoverable, visible and accessible to a wider audience
- **Increase interoperability:** Your CFI data can be analyzed with other datasets, enabling broader regional insights.
- **Retain flexibility:** You keep your own data collection methods; NEFIN only standardizes how the data is stored and interpreted.
- **Gain visibility and attribution:** Your program will be cited and acknowledged in all uses of NEFIN data products.

We've tried to remove as many barriers as possible for you to contribute your data, but there are a few one-time setup steps before your data can be uploaded to the NEFIN system. Once set up, updating your data in NEFIN is a relatively straightforward process and you will be able to do that at any time.

What's Needed

Your role:

- Provide information about your program's design, codes, and data structure.
- Complete the metadata and code-mapping templates provided in the package.
- Confirm our interpretation of your data.
- Perform updates to your data as they become available.

Our role:

- Walk you through each step of the process.
- Supply templates and provide guidance in completing them.
- Set up your program and ingest the data you provide.
- Provide instruction and support on how to perform data updates.

Pathways for Data Integration

You can integrate your program into NEFIN in three different ways, depending on how little or how much reformatting of your data you want to do and how quickly you want your data integrated into NEFIN.

Method of Integration	Description	Your Effort	Speed of Integration
1. Provide data "as is"	You provide your data "as is". You provide all the details about your data and we develop a preprocessor to reformat it into a standard format that can be ingested into NEFIN. Requires the least effort from you up front but takes us the most time, so integration is slower.	Low	Slowest
2. Provide data that is a close match to the NEFIN Standard Template	Your data already resembles the NEFIN template or you perform minimal reformatting before you give it to us so that it closely matches the template formatting. You provide details on file and field names. Requires moderate effort on your part.	Moderate	Medium
3. Provide data that is reformatted to the NEFIN Standard Template	You reformat your data to match the NEFIN template provided in this package (file names and field names exactly as specified). Requires the most work on your end to reformat your data but integration is fastest.	High	Fastest

One-Time Setup Steps

1. **Program Metadata Documentation**
   Fill out the newProgramTemplate spreadsheet with:

   a. Program name (as it should appear on NEFIN).

b. Short program description.

c. Primary program contact (name, email, affiliation).

d. Plot design information (plot size, subplot design, measurement cycles).

e. Any additional details to be published with your program's entry on NEFIN.

2. **Code Mapping**
Complete the templateCodes spreadsheet to map your program's codes to NEFIN's standard codes and their meaning if numeric. Tabs include:

a. **Tree status codes** (e.g., 0, 1, live, dead, missing).

b. **Sapling status codes** (e.g., live, dead, grew into tree).

c. **Crown class codes** (e.g., codominant, dominant).

d. **Seedling size classes** (e.g.,A, B, 0–15 cm, 16–30 cm).

e. **Species codes** (mapped to ITIS codes with Latin and common names).

Notes:

1. If you already use ITIS species codes and include them in your observation data, you do not need to fill out the species codes tab.

2. If you only measure live saplings without a status code, you can skip the sapling status tab (it will be assumed all saplings are live).

3. Leave unused tabs blank or add new tabs for additional code lists used in your program.

3. **Provide data files**
Choose one of the three pathways above for structuring your data and provide the data files associated with that pathway.

Standard Data Files (for Pathways 2 & 3):
- **Plot file:** plot-level info (e.g., plot ID, latitude, longitude).

- **Subplot file (optional):** subplot-level info combined with plot info to define unique observation locations.

- **Tree file:** individual tree observation data (e.g., measurements by plot/subplot/year).

- **Sapling file (optional):** individual sapling observations.

- **Seedling file (optional):** seedling counts by plot/subplot/year/species (can be either wide format ie size class counts for plot/subplot/year/species on a single line or long format ie count for each plot/subplot/year/species/seedling size class on its own line)

Ongoing and Optional Steps

1. Update your data on the NEFIN portal, at your convenience, when you have new versions available. FEMC provides training and the process is simple as long as your data remains in a similar format to your original data.

2. Optionally, work with FEMC to provide further detailed information about your data to allow it to also be available in our [CFI Comparison tool](#).

Next Steps

1. Contact FEMC at **femc@uvm.edu** and schedule a short walkthrough with our staff if needed.

2. Review the three pathways and decide which fits your program best. We can provide help in deciding. We will provide examples, guidance, and support tailored to whichever pathway you choose.

3. Complete the 'One-Time Setup Steps' by filling out the newProgramTemplate and templateCodes spreadsheets and provide data files.