

SIMAP Guidance for NFT Network: How to transfer your data from the NFT to SIMAP

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This document explains how to transfer your data from the Excel-based Nitrogen Footprint Tool (NFT) to the web-based SIMAP. See the 'What has changed' document for a complete list of the changes in methodology and emissions factors in SIMAP, and how those changes could affect your results.

TIER 1

The text in green refers to Tier 1 functionality. To perform these functions, you would have to upgrade your account from Basic to Tier 1. See www.unhsimap.org for more information.

Utilities, transport, fertilizer, compost (select one of the following)

- **If your campus uses the Campus Carbon Calculator:**
 - Simply upload your CCC Excel spreadsheet under the 'Data Mgmt' tab and the 'Import' link.
 - Ensure that the inventory data from your CCC matches your NFT.
- **If your campus uses CarbonMAP:**
 - Contact us at simap@unh.edu to request that your data be exported from CarbonMAP, and we will send you a set of files.
 - Import those files to SIMAP under the 'Data Mgmt' tab and 'Import' link.
 - Ensure that the inventory data from your CarbonMAP matches your NFT.
- **If your campus does a custom C footprint calculation:**
 - You will need to manually enter your energy use data in SIMAP. You can do that under the '2. Data entry' tab. Please see the SIMAP user's guide (Resources tab) for details.

Food purchases

- **Categorize food data according to new guidelines:**
 - We have updated the food category guidelines and multi-ingredient food guidelines to simplify and improve the accuracy of the food nitrogen footprint.
 - We suggest updating your previous years' food categories to follow these guidelines, which can be found in the food uploader spreadsheet (downloaded in the 'Resources' tab of SIMAP).
- **If your campus does not scale food data or scales it on a total basis (not by location):**
 - Open the SIMAP food uploader. The basic food uploader can be downloaded under the 'Resources' tab of SIMAP. For the food uploader tailored to the NFT, please contact Allison.Leach@unh.edu.
 - Follow the instructions in the uploader. There are 3 steps:
 - Copy-paste as VALUES relevant columns from your NFT into the first tab of the uploader (1 – Enter NFT data here). Note that you can enter your food data in one of two formats:
 - Option 1: Food totals by category. These are on the 'Food Summary' tab of your NFT.
 - Option 2: Individual food products. This would come from your food data entry, such as the 'Food Calculation 4' tab.

- Copy-paste as VALUES the food data from the 'Step 2' tab into the 'Data entry' tab. This is necessary because SIMAP can only import values, not equations.
 - Import your food uploader under the 'Data Mgmt' tab and the 'Import' link
- If your campus scales food data by location:
 - Please contact us (Allison.Leach@unh.edu and esm9gg@virginia.edu). We have a separate version of the uploader for scaling before import to SIMAP.

Food consumption / wastewater treatment (select one)

- There are two possible approaches:
 - Wastewater approach has a broader system bounds (any wastewater treated from the campus).
 - Food consumption approach is related only to food purchased by a campus, regardless of where that wastewater is treated. This can be calculated in two ways:
 - Based on a calculated wastewater volume, or
 - Based on a measured wastewater volume.
- Wastewater approach:
 - Enter campus wastewater volume. This may have been imported as part of your CCC spreadsheet.
 - Select a pre-defined treatment system (septic – 15% N removal, aerobic – 25% N removal, anaerobic – 25% N removal, anaerobic digestion – 90% N removal),
 - OR select 'other' and enter a custom wastewater emissions factor on the '2. Data entry' tab. The custom emissions factor is calculated as follows using the average N content of wastewater in the US:
 - Wastewater Other N loss factor [kg N / gal] = (1 - NFT N removal factor) * (0.000189 kg N/US gal)
- Food consumption approach with a calculated wastewater volume:
 - Choose this if you want to continue using the food consumption approach and if your campus does NOT enter its wastewater volume for its carbon footprint.
 - Wastewater volume [gal] = (Food consumption N footprint [kg N]) * (1 / 0.000189 kg N/US gal)
 - Select a pre-defined treatment system (septic – 15% N removal, aerobic – 25% N removal, anaerobic – 25% N removal, anaerobic digestion – 90% N removal),
 - OR select 'other' and enter a custom wastewater emissions factor on the '2. Data entry' tab. The custom emissions factor is calculated as:
 - Wastewater Other N loss factor [kg N / gal] = (1 - NFT N removal factor) * (0.000189 kg N/US gal)
- Food consumption approach using measured campus wastewater volume:
 - Choose this if you want to continue using the food consumption approach and if your campus also enters its wastewater volume for its carbon footprint. Note that by choosing this approach, your C and N footprint would have a different system bounds for wastewater.
 - For guidance on this approach, please contact Allison.Leach@unh.edu

Research animals (complete both parts)

- Research animals are not yet built into SIMAP, but the footprints can be manually calculated. There are 2 parts to a research animal footprint split across scopes 1 and 3, which need to be

calculated and entered with different approaches. With this approach, you will get a total research animal N footprint; SIMAP will not report the animal-specific emissions.

- Scope 1: On-site waste generation and carcass incineration
 - On the 'Research animals' tab of your NFT, navigate to the first table, which starts on row 6.
 - Calculate a custom research animal emissions factor [kg N/animal]:
 - = (total from first table in kg N) / (total number of animals in column D)
 - In SIMAP:
 - Enter the total number of animals in the '2. Data entry' tab and the 'Animals' link. Click the 'Enter data' button. From the source drop-down, select 'Agriculture sources: Animal husbandry: Other'.
 - Enter your custom emissions factor in the '2. Data entry' tab and the 'Emission factors' link. From the drop-downs select:
 - Scope: 1
 - Source: Agriculture sources: Animal husbandry: Other
 - Emission type: Other N
- Scope 3: Feed production N footprint
 - On the 'Research animals' tab of your NFT, navigate to the second table, which starts around row 32.
 - Add the total mass of feed (kg) by feed type (cereals, pulses, poultry, etc.).
 - Use a second copy of the food uploader (see 'Food purchases' section above) and enter this feed purchase information. Be sure to use descriptive labels that indicate that the data entry is animal feed (e.g., Animal feed: Grains)
 - Import this second food uploader to SIMAP.
 - Note – it is fine to import multiple food uploaders with different data sets. Your previously uploaded food data will be maintained in SIMAP.
 - Notes:
 - The animal feed N footprint will be displayed as part of your food production N footprint.
 - When processing your data, be sure to keep in mind that some of your food production N footprint is due to research animal feed. You should separate this out in any reporting you do.
 - This will be improved in a future version of SIMAP.

Research farms

- Research farm animals can be entered in SIMAP, but we do not yet have nitrogen emissions factors per head of livestock. Similarly, the N footprint of research farm crops can be calculated using the fertilizer application section, but you may need a custom emissions factor.
- Please contact us (Allison.Leach@unh.edu) for guidance on how to calculate your research farm N footprint in SIMAP.