Warming Metadata Full

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## Notation

disturbanceinit22\_wide:

* plot: plot number, from 1-40
* treatment: treatment of the plot
  + control: no greenhouse
  + warming: added plastic enclosure (“greenhouse”) at a height of 30 cm in 2022, and 50 cm in 2023
* orientation: seeds added
  + SLTR: seeds added to the left diagonal
  + SRTL: seeds added to the right diagonal
* Pmaj1, Pmaj2, Pmaj3:
  + Length of longest leaf (cm) of 3 individuals of *P. major* after transplant
* Lvul1, Lvul2, Lvul3:
  + Height (cm) of 3 individuals of *L. vulgaris* after transplant
* Toff1, Toff2, Toff3:
  + Length of longest leaf (cm) of 3 individuals of *T. officinale* after transplant

warmingperf\_wide:

* plot: plot number, from 1-40
* treatment: treatment of the plot
  + control: no greenhouse
  + warming: added plastic enclosure (“greenhouse”) at a height of 30 cm in 2022, and 50 cm in 2023
* orientation: seeds added
  + SLTR: seeds added to the left diagonal
  + SRTL: seeds added to the right diagonal
* id: unique identifier for transplant
* species: the non-native species measured, and numbered within each plot
* height22: height (cm) of *L. vulgaris* after transplant
* leaflength22: length of longest leaf (cm) of *P. major* and *T. officinale* after transplant
* survival\_jun23: start-of-season survival, measured in June
  + 1: alive
  + Note: start-of-season survival should be disconnected from individual plants; surviving plants are totaled from the entire plot. End-of-season survival includes additional survivors.
* survival23: end-of-season survival, measured on 08/20/2023
  + 1: alive
* dead23:
  + 0: the individual is alive (at least 1 ramet emerged and survived)
  + 1: no emergence record, i.e., dead
* height23: height (cm) of *L. vulgaris* after 2023 growing season, measured on 08/21/2023
* ramets23: number of ramets of *L. vulgaris* after 2023 growing season, measured on 08/21/2023
* leaflength23: length of longest leaf (cm) of *P. major* and *T. officinale* after 2023 growing season, measured on 08/21/2023
* numleaves23: number of leaves on *P. major* and *T. officinale* after 2023 growing season, measured on 08/21/2023
* flowering23: flowering success
  + 1: flowered
* numflower23: number of flowers, measured on 08/21/2023
* notes23: notes
* survival\_jun24: start-of-season survival, measured on
* survival24: end-of-season survival, measured on 08/10/2024
  + 1: alive
* dead24:
  + 1: the individual was alive in 2023, but dead in 2024
* height24: height (cm) of *L. vulgaris* after 2024 growing season, measured on 08/10/2024
* ramets24: number of ramets of *L. vulgaris* after 2024 growing season, measured on 08/10/2024
* leaflength24: length of longest leaf (cm) of *P. major* and *T. officinale* after 2024 growing season, measured on 08/10/2024
* numleaves24: number of leaves on *P. major* and *T. officinale* after 2024 growing season, measured on 08/10/2024
* flowering24: flowering success
  + 1: flowered
* numflower24: number of flowers, measured on 08/15/2024
* biomass\_a24: aboveground biomass (g), weighed on 08/15/2024
* biomass\_b24: belowground biomass (g), weighed on 08/15/2024
* biomass24: sum of above- and belowground biomass (g)
* notes24: notes

warmingseed\_wide:

* plot: plot number, from 1-40
* treatment: treatment of the plot
  + control: no greenhouse
  + warming: added plastic enclosure (“greenhouse”) at a height of 30 cm in 2022, and 50 cm in 2023
* orientation: transplants and seeds added
  + SLTR: seeds added to the left diagonal
  + SRTL: seeds added to the right diagonal
* Lvul23, Pmaj23, Toff23, Salb23:
  + Number of seedlings of each species (*L. vulgaris*, *P. major*, *T. officinale*, *S. alba*) found within diagonal in each plot, data collected 08/22/2023
* Lvul24, Pmaj24, Toff24, Salb24:
  + Number of seedlings of each species found, data collected 08/10/2024
* Total amount of seeds added Aug 2022
  + *Linaria vulgaris*: 400 (KSR)
  + *Plantago major*: 300 (Churchill 2022)
  + *Taraxacum officinale*: 300 (Churchill 2022)
  + *Capsella bursa-pastoris*: 300 (Churchill 2021)
  + *Silena alba*: 300 (50 from rhizome Churchill 2021, and 250 from Churchill 2022)
  + *Thlaspi arvense*: 500 (Churchill 2022)

warmingmoist23\_wide:

* plot: plot number, from 1-40
* treatment: treatment of the plot
  + control: no greenhouse
  + warming: added plastic enclosure (“greenhouse”) at a height of 30 cm in 2022, and 50 cm in 2023
* pre: initial weight (g) of the soil sample
* post: weight (g) of soil sample after loss-on-drying (60°C for 48 hours)

dataloggers

* dataloggers##.csv: raw datalogger data after wrangling
* data##.csv: final datalogger data with filters for growing season
* datalogger\_daily\_average\_df.csv: average daily temperature (24-hour period from 00:00 to 23:59)
* datalogger\_hourly\_average\_df.csv: average hourly temperature

## Updates

* none so far