Tundra/Boreal Dispersal Metadata Full

Vicki M. Zhang

20 Sep 2024

## Notation

Columns:

* habitat: habitat of the block
* site: number of the site, between 1-4 for tundra blocks, and 5-8 for boreal forest blocks
* lat and long: coordinates of the block
* id: unique identifier for transplant
* plot: plot number of the plant, from 1-30
* species: species name of the plant
  + Lvul: *Linaria vulgaris*
  + Pmaj: *Plantago major*
  + Toff: *Taraxacum officinale*
* height21: measured height (cm) of *L. vulgaris* at the end of the 2021 season after transplant
* leaflength21: measured leaf length (cm) of *P. major* and *T. officinale* at the end of the 2021 season after transplant
* flowering21: flowering success each species at the end of the 2021 season after transplant
  + Y: plant has flowered (flowerhead, flowering stem)
  + N: no evidence of flowering
* survival\_jun0722, survival\_jun1422, survival\_jun2122, survival\_jun2822, survival\_jul0522, survival\_jul1222, survival\_jul1922, survival\_jul2722, survival\_aug322, survival\_aug922, survival\_aug1622: weekly measure of survival of each plant in 2022
  + notation is: “survival\_” + “month” + “day” + “22”, so “survival\_jun0722” is survival on June 7th, 2022
  + data for survival is the number of new ramets that appeared that week; the first appearance of a ramet would be indicated by a “1” under that date
  + for some individuals, especially *L. vulgaris*, new ramets would appear weekly – “1”, “2”, or even “5” new shoots may be recorded in a single week
  + dead: the plant had produced a shoot earlier, but it has died, or cannot be found
* survival22: survival in 2022
  + 1: alive
  + 0: dead
* dead22:
  + 0: the individual is alive (at least 1 ramet emerged and survived)
  + 1: no emergence record, i.e., dead
* ramets22: total number of new shoots for each species recorded at the end of the 2022 field season; sum of all the previous survival data
  + dead: the plant had produced a shoot, but it has died, or cannot be found at some point
* flower\_jun2822, flower\_jul0522, flower\_jul1222, flower\_jul2722, flower\_aug322, flower\_aug922, flower\_aug1622, flower\_aug2322: weekly flowering success of each plant in 2022
  + notation is: “flower\_” + “month” + “day” + “22”, so “flower\_jun2822” is the flowering success on June 28th, 2022
  + data for flowering is the number of new flowers that appeared that week; the first appearance of a flower would be indicated by a “1” under that date
  + for some individuals, especially *L. vulgaris*, new ramets would appear weekly – “1”, “2”, or even “5” new shoots may be recorded in a single week
* totalflower22: total number of flowering stems for each species recorded at the end of the 2022 field season; sum of all the previous flowering data
  + note that this is different from totalflower24, which is data on the number of flowers for *L. vulgaris* and *T. officinale*
* flowering22: flowering success each species at the end of the 2022 season
  + Y: plant has flowered (flowerhead, flowering stem)
  + N: no evidence of flowering
* seedpod\_jul0522, seedpod\_jul1222, seedpod\_jul2722, seedpod\_aug2322: weekly seedpod success of each plant in 2022
  + notation is: “seedpod\_” + “month” + “day” + “22”, so “seedpodjul0522” is the seedpod success on July 5th, 2022
  + data for seedpods is the number of new seedpods that appeared that week; the first appearance of a seedpod would be indicated by a “1” under that date
* height22: final height (cm) of *L. vulgaris*, measured at the end of the 2022 season
* leaflength22, leaflength23, leaflength24: final length (cm) of the longest leaf of *P. major* and *T. officinale*, measuredat the end of the 2022
  + some plants produced two or three individual shoots, so this is the leaf length of the shoot with the most leaves
* numleaves22\_first: number of total leaves of each individual
  + some plants produced two or three individual shoots, so this is the leaf count of the shoot with the most leaves
* leaflength22\_second: for plants that produced individual shoots, the final length (cm) of the longest leaf of the second-largest shoot of *P. major* and *T. officinale* at the end of the 2022 field season
  + some plants produced two or three individual shoots, so this is the leaf length of the shoot with the second-most leaves
* numleaves22\_second: the number of total leaves of the individual shoot with the second-most leaves
* leaflength22\_third: for plants that produced individual shoots, the final length (cm) of the longest leaf of the third-largest shoot of *P. major* and *T. officinale* at the end of the 2022 field season
  + some plants produced two or three individual shoots, so this is the leaf length of the shoot with the third-most leaves
* numleaves22\_third: the number of total leaves of the individual shoot with the third-most leaves
* numleaves22: sum total of all the leaves of all the individual shoots
* survival\_jun23: start-of-season survival, measured on 06/07/2023
  + 1: alive
* survival23: end-of-season survival, measured on 08/20/2023
  + 1: alive
* dead23:
  + 1: the individual was alive in 2022, but dead in 2023
* dead24:
  + 1: the individual was alive in 2023, but dead in 2024
* height23: height (cm) of *L. vulgaris* after 2023 growing season, measured on 08/20/2023
* ramet23: number of ramets of *L. vulgaris* after 2023 growing season, measured on 08/20/2023
* leaflength23: length of longest leaf (cm) of *P. major* and *T. officinale* after 2023 growing season, measured on 08/20/2023
* numleaves23: number of leaves on *P. major* and *T. officinale* after 2023 growing season, measured on 08/20/2023
* ramets23: number of ramets of *L. vulgaris* after 2023 growing season, measured on 08/20/2023
* numflower23: number of flowering stems, measured on 08/20/2023
* notes23: notes for 2023 field season
* survival\_jun24: start-of-season survival, measured on 06/06/2024 (tundra) and 06/13/2024 (boreal forest)
  + 1: alive
* survival24: end-of-season survival, measured on 08/08/2024
* dead24:
  + 1: the individual was alive in 2023, but dead in 2024
* height24: height (cm) of *L. vulgaris* at the end of the growing season, measured on August 8th, 2024
* ramet24: number of ramets of *L. vulgaris* at the end of the growing season, measured on August 8th, 2024
* leaflength24: length of longest leaf (cm) of *P. major* and *T. officinale* at the end of the growing season, measured on 08/08/2024
* numleaves24: number of leaves on *P. major* and *T. officinale* at the end of the growing season, measured on 08/08/2024
* ramets24: number of ramets of *L. vulgaris* at the end of the growing season, measured on August 8th, 2024
* numflower24: number of flowers, at the end of the growing season, measured on 08/08/2024
  + for *P. major*, this is the number of flowering stems
* biomass\_a24: biomass (mg) of aboveground plant material, weighed 08/10/2024
  + NA: biomass missing
* biomass\_b24: biomass (mg) of belowground plant material, weighed 08/10/2024
  + NA: biomass missing
* biomass24: biomass (mg) of entire plant (sum of above- and belowground)
* notes24: notes for 2024 field season

## Updates

* none so far