Table headings for the table of factorial model simulations

Parameter values

Drink: Drink behavior condition controlling rate of drinking with temperature

Values:

* True (temperature dependent)
* False (temperature independent).

Rest: Rest/Graze condition controlling resting and grazing behavior with temperature

Values:

* 1 (Always rest in the field and graze more)
* 2 (Always rest under trees and graze less)
* 3 (Rest/Graze based on temperature and 24C Temperature threshold).

Temp: Temperature data (daily min/max) from McGhee Tyson Airport station (station ID: GHCND:USW00013891) in Knoxville, Tennessee to use in model simulations

Values:

* Spring (April-May)
* Summer(July\_August)
* Fall (October-November)

Year: Empirical temperature data year

Values:2002-2011

Model Outputs

R0: The total number of secondary colonizations derived from the initially infected individual during the course of its infectious period, derived either from direct or environmental (Graze, Water) pathways.

Manure: Total average manure (Fecal pats) per day

TotalInf: Total Incident cases occurring over the course of the model simulation from all pathways.

PDInf: Total primary incident cases (first time colonizations) from a direct pathway

PWInf: Total primary incident cases (first time colonizations) from the water pathway

PGInf: Total primary incident cases (first time colonizations) from the grazing pathway

SDInf: Total secondary incident cases (re-colonizations) from the grazing pathway

SWInf: Total secondary incident cases (re-colonizations) from the grazing pathway

SGInf: Total secondary incident cases (re-colonizations) from the grazing pathway

Prev: Prevalence over the duration of the model simulation, calculated as

TotalInf/24 (since all simulations start with 1 infected individual).

RestLab: Label for Rest/Graze behavior condition used in figures (Rest Cool=1, Rest Warm =2, Rest Dep =3)

TempLab: Label for Temperature used in figures (April-May=Spring; July-August=Summer; October-November=Fall)

DrinkLab: Label for Drink behavior conditions used in figures (Temp Dep=true; Temp Indep=false)

Dir = The number of new infections from direct pathways overall

Water = The number of new infections from water pathways overall

Grass = The number of new infections from grazing pathways overall

DirPer = The number of new infections from a direct pathway as a percentage of total incident cases (Dir / TotalInf)

WaterPer = The number of new infections from a water pathway as a percentage of total incident cases (Water / TotalInf)

GrazePer = The number of new infections from a graze pathway as a percentage of total incident cases (Grass / TotalInf)