28.22, −81.6

Cor. lag = 8
r = 1
Cor. lag GAM = 7
r GAM = 0.79
10% lag = −4
10% GAM lag = −4
GAM R2 Moth = 0.4
GAM R2 Cat = 0.04

Life stage
— Caterpillars
— GAM Cats
— GAM Moths
— Moths

Caterpillars = 75
Moths = 849

Number of observations

46.19, −76.79

Cor. lag = 5
r = 0.95
Cor. lag GAM = 6
r GAM = 1
10% lag = −1
10% GAM lag = 0
GAM R2 Moth = 0.54
GAM R2 Cat = 0.68

Life stage
— Caterpillars
— GAM Cats
— GAM Moths
— Moths

Caterpillars = 93
Moths = 620

45.56, −72.94

Cor. lag = 5
r = 0.79
Cor. lag GAM = 5
r GAM = 0.99
10% lag = −3
10% GAM lag = −1
GAM R2 Moth = 0.46
GAM R2 Cat = 0.88

Number of observations

Life stage
— Caterpillars
— GAM Cats
— GAM Moths
— Moths

Caterpillars = 210
Moths = 1758

Jan Feb Mar Apr May Jun Jul Aug Sep Oct

44.89, −69.2

Cor. lag = 5
r = 0.99
Cor. lag GAM = 0
r GAM = −0.93
10% lag = 8
10% GAM lag = 9
GAM R2 Moth = 0.01
GAM R2 Cat = 0.82

Number of observations

Life stage
— Caterpillars
— GAM Cats
— GAM Moths
— Moths

Caterpillars = 65
Moths = 605

Jan Feb Mar Apr May Jun Jul Aug Sep Oct

42.43, −89.69

Cor. lag = 6
r = 1
Cor. lag GAM = 6
r GAM = 1
10% lag = 1
10% GAM lag = 0
GAM R2 Moth = 0.61
GAM R2 Cat = 0.5

Number of observations

Life stage
— Caterpillars
— GAM Cats
— GAM Moths
— Moths

Caterpillars = 106
Moths = 250

Jan Feb Mar Apr May Jun Jul Aug Sep Oct

43.13, −86.14

r = 0.5
Cor. lag GAM = 6
r GAM = 1
10% lag = 4
10% GAM lag = 4
GAM R2 Moth = 0.36
GAM R2 Cat = 0.41

Number of observations

Life stage
— Caterpillars
— GAM Cats
— GAM Moths
— Moths

Caterpillars = 74
Moths = 204

44.43, −78.75

Cor. lag = 4
r = 0.86
Cor. lag GAM = 4
r GAM = 0.98
10% lag = 2
10% GAM lag = 2
GAM R2 Moth = 0.85
GAM R2 Cat = 0.91

Number of observations

Life stage
— Caterpillars
— GAM Cats
— GAM Moths
— Moths

Caterpillars = 396
Moths = 2596

43.78, −75

Cor. lag = 3
r = 0.85
Cor. lag GAM = 4
r GAM = 0.89
10% lag = 5
10% GAM lag = 5
GAM R2 Moth = 0.69
GAM R2 Cat = 0.86

Number of observations

Life stage
— Caterpillars
— GAM Cats
— GAM Moths
— Moths

Caterpillars = 146
Moths = 1924

Jan Feb Mar Apr May Jun Jul Aug Sep Oct

43.13, −71.36

Cor. lag = 7
r = 1
Cor. lag GAM = 7
r GAM = 1
10% lag = 3
10% GAM lag = 2
GAM R2 Moth = 0.63
GAM R2 Cat = 0.85

Number of observations

Life stage
— Caterpillars
— GAM Cats
— GAM Moths
— Moths

Caterpillars = 432
Moths = 3326

Jan Feb Mar Apr May Jun Jul Aug Sep Oct

40.68, −87.6

Cor. lag = 6
r = 0.55
Cor. lag GAM = 6
r GAM = 1
10% lag = 3
10% GAM lag = 3
GAM R2 Moth = 0.17
GAM R2 Cat = 0.35

Number of observations

Life stage
— Caterpillars
— GAM Cats
— GAM Moths
— Moths

Caterpillars = 130
Moths = 188

41.36, −84.13

Cor. lag = 2
r = 0.52
Cor. lag GAM = 6
r GAM = 1
10% lag = 3
10% GAM lag = 5
GAM R2 Moth = 0.2
GAM R2 Cat = 0.43

Number of observations

Life stage
— Caterpillars
— GAM Cats
— GAM Moths
— Moths

Caterpillars = 101
Moths = 235

42.01, −80.56

Cor. lag = 6
r = 0.77
Cor. lag GAM = 6
r GAM = 1
10% lag = 1
10% GAM lag = 3
GAM R2 Moth = 0.27
GAM R2 Cat = 0.85

Number of observations

Life stage
— Caterpillars
— GAM Cats
— GAM Moths
— Moths

Caterpillars = 249
Moths = 982

42.01, −76.94

Cor. lag = 3
r = 0.71
Cor. lag GAM = 4
r GAM = 1
10% lag = 4
10% GAM lag = 4
GAM R2 Moth = 0.35
GAM R2 Cat = 0.66

Number of observations

Life stage
— Caterpillars
— GAM Cats
— GAM Moths
— Moths

Caterpillars = 223
Moths = 2017

Jan Feb Mar Apr May Jun Jul Aug Sep Oct

41.36, −73.37

Cor. lag = 0
r = 0.87
Cor. lag GAM = 4
r GAM = 0.99
10% lag = 3
10% GAM lag = 3
GAM R2 Moth = 0.57
GAM R2 Cat = 0.86

Life stage
— Caterpillars
— GAM Cats
— GAM Moths
— Moths

Caterpillars = 450
Moths = 967

38.91, −85.63

Cor. lag = 7
r = 0.9
Cor. lag GAM = 3
r GAM = 0.99
10% lag = 8
10% GAM lag = 10
GAM R2 Moth = 0.3
GAM R2 Cat = 0.37

Life stage
— Caterpillars
— GAM Cats
— GAM Moths
— Moths

Caterpillars = 177
Moths = 399

39.58, −82.23

Cor. lag = 7
r = 0.79
Cor. lag GAM = 7
r GAM = 1
10% lag = 3
10% GAM lag = 5
GAM R2 Moth = 0.33
GAM R2 Cat = 0.65

Number of observations

Life stage
— Caterpillars
— GAM Cats
— GAM Moths
— Moths

Caterpillars = 124
Moths = 521

40.23, −78.75

Cor. lag = 5
r = 0.7
Cor. lag GAM = 5
r GAM = 0.98
10% lag = 6
10% GAM lag = 6
GAM R2 Moth = 0.46
GAM R2 Cat = 0.88

Number of observations

Life stage
— Caterpillars
— GAM Cats
— GAM Moths
— Moths

Caterpillars = 271
Moths = 1709

39.58, −75.27

Cor. lag = 8
r = 1
Cor. lag GAM = 5
r GAM = 0.74
10% lag = 4
10% GAM lag = 5
GAM R2 Moth = 0.57
GAM R2 Cat = 0.92

Number of observations

100

10

1

Jan Feb Mar Apr May Jun Jul Aug Sep Oct

Life stage
— Caterpillars
— GAM Cats
— GAM Moths
— Moths

Caterpillars = 318
Moths = 1507

33.74, −95.9

Cor. lag = 7
r = 0.32
Cor. lag GAM = 7
r GAM = 0.98
10% lag = 6
10% GAM lag = 6
GAM R2 Moth = 0.45
GAM R2 Cat = −0.02

Life stage
- Caterpillars
- GAM Cats
- GAM Moths
- Moths

Caterpillars = 76
Moths = 1156

36.45, −87.06

Cor. lag = NA
r = NA
Cor. lag GAM = NA
r GAM = NA
10% lag = 1
10% GAM lag = 1
GAM R2 Moth = 0.1
GAM R2 Cat = 0.15

Life stage
— Caterpillars
— GAM Cats
— GAM Moths
— Moths

Caterpillars = 60
Moths = 249

37.13, −83.76

Cor. lag = 3
r = 0.65
Cor. lag GAM = 1
r GAM = 0.85
10% lag = −3
10% GAM lag = 0
GAM R2 Moth = 0.02
GAM R2 Cat = 0.56

Number of observations

Life stage
— Caterpillars
— GAM Cats
— GAM Moths
— Moths

Caterpillars = 81
Moths = 314

Jan Feb Mar Apr May Jun Jul Aug Sep Oct

37.79, −80.44

Cor. lag = 5
r = 0.68
Cor. lag GAM = 6
r GAM = 1
10% lag = 7
10% GAM lag = 8
GAM R2 Moth = 0.21
GAM R2 Cat = 0.63

Life stage
— Caterpillars
— GAM Cats
— GAM Moths
— Moths

Caterpillars = 80
Moths = 240

37.79, −77.06

Cor. lag = 3
r = 0.7
Cor. lag GAM = 3
r GAM = 0.92
10% lag = 6
10% GAM lag = 5
GAM R2 Moth = 0.7
GAM R2 Cat = 0.82

Number of observations

100.0

10.0

1.0

0.1

Jan   Feb   Mar   Apr   May   Jun   Jul   Aug   Sep   Oct

Life stage
— Caterpillars
— GAM Cats
— GAM Moths
— Moths

Caterpillars = 358
Moths = 953

30.99, −95.79

Cor. lag = 8
r = 1
Cor. lag GAM = 2
r GAM = 0.89
10% lag = 5
10% GAM lag = 5
GAM R2 Moth = 0.39
GAM R2 Cat = 0.57

Life stage
— Caterpillars
— GAM Cats
— GAM Moths
— Moths

Caterpillars = 129
Moths = 463

34.7, −85.28

Cor. lag = 6
r = 0.84
Cor. lag GAM = 7
r GAM = 0.93
10% lag = 4
10% GAM lag = 3
GAM R2 Moth = 0.57
GAM R2 Cat = 0.75

Life stage
— Caterpillars
— GAM Cats
— GAM Moths
— Moths

Caterpillars = 107
Moths = 818

35.33, −82

Cor. lag = 6
r = 0.78
Cor. lag GAM = 8
r GAM = 1
10% lag = 7
10% GAM lag = 8
GAM R2 Moth = 0.67
GAM R2 Cat = 0.88

Number of observations

Life stage
— Caterpillars
— GAM Cats
— GAM Moths
— Moths

Caterpillars = 172
Moths = 1595

36, −78.75

Number of observations

Cor. lag = 7
r = 0.62
Cor. lag GAM = 7
r GAM = 0.93
10% lag = 5
10% GAM lag = 6
GAM R2 Moth = 0.4
GAM R2 Cat = 0.33

Life stage
— Caterpillars
— GAM Cats
— GAM Moths
— Moths

Caterpillars = 164
Moths = 555

Jan Feb Mar Apr May Jun Jul Aug Sep Oct

30.29, −90.96

Cor. lag = NA
r = NA
Cor. lag GAM = NA
r GAM = NA
10% lag = 5
10% GAM lag = 4
GAM R2 Moth = 0.45
GAM R2 Cat = 0.6

Number of observations

Life stage
— Caterpillars
— GAM Cats
— GAM Moths
— Moths

Caterpillars = 48
Moths = 178

Jan Feb Mar Apr May Jun Jul Aug Sep Oct

31.23, −88.53

Cor. lag = 6
r = 0.61
Cor. lag GAM = 7
r GAM = 0.9
10% lag = 10
10% GAM lag = 8
GAM R2 Moth = 0.09
GAM R2 Cat = 0.39

Number of observations

10

3

1

Jan Feb Mar Apr May Jun Jul Aug Sep Oct

Life stage
— Caterpillars
— GAM Cats
— GAM Moths
— Moths

Caterpillars = 69
Moths = 86

32.11, −86.07

Cor. lag = 7
r = 0.44
Cor. lag GAM = 7
r GAM = 0.96
10% lag = 14
10% GAM lag = 13
GAM R2 Moth = 0.35
GAM R2 Cat = 0.63

Life stage
— Caterpillars
— GAM Cats
— GAM Moths
— Moths

Caterpillars = 71
Moths = 1088

33.53, −80.33

Cor. lag = 7
r = 0.77
Cor. lag GAM = 7
r GAM = 1
10% lag = 6
10% GAM lag = 6
GAM R2 Moth = 0.48
GAM R2 Cat = 0.66

Life stage
— Caterpillars
— GAM Cats
— GAM Moths
— Moths

Caterpillars = 61
Moths = 207