Supplementary Table S4. Exploratory Generalized Additive Model runs, Family: quasi-poisson, Link function: log

All unknown or missing values for region, age and sex were removed. Sample size reduced from 328 to 304.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Model (mni\_sum ~ …) | | | df | Null  Deviance | Dispersion  (scale estimate) | Deviance Explained % | GCV (generalized cross validation) |
| Null model | | | 304 | 5706.70 | 21 |  |  |
| ~ comname + londd + latdd + s(latdd, by=comname,bs="fs") + season + sex + as.factor(guild\_obs) + as.factor(prey) | | | 278.438 | 2733.64 | 13.1 | 52.1 | 10.719 |
| ~factor(guild\_obs)+s(londd)+s(month)+  factor(prey)+sex+s(latdd)+comname | | | 280.4254 | 2812.326 | 13.689 | 50.7 | 10.872 |
| ~factor(guild\_obs)+s(londd)+s(month)+  factor(prey)+sex+s(latdd) | | | 281.2516 | 2830.775 | 13.685 | 50.4 | 10.879 |
| ~factor(guild\_obs)+s(londd)+s(month)+  factor(prey)+sex | | | 283.0555 | 2879.707 | 13.893 | 49.5 | 10.926 |
|  | | |  |  |  |  |  |
| ~prey(factor)\*\*\* |  |  | 295 | 3672.050 | 17.825 | 35.7 | 12.827 |
| ~guild\_obs(factor)\*\*\* |  |  | 299 | 3840.461 | 17.803 | 32.7 | 13.059 |
| ~prey\*\*\* |  |  | 302 | 4083.539 | 17.908 | 28.4 | 13.611 |
| ~guild\_obs\*\*\* |  |  | 302 | 4204.128 | 18.121 | 26.3 | 14.013 |
| ~ti(latdd.londd)\*\*\* |  |  | 294.3895 | 4859.800 | 21.104 | 14.8 | 17.047 |
| ~s(month)\*\*\* |  |  | 298.0186 | 4962.978 | 18.204 | 13.0 | 16.987 |
| ~s(londd)\*\*\* |  |  | 298.3151 | 4985.371 | 19.514 | 12.6 | 17.030 |
| ~s(latdd)\*\*\* |  |  | 295.0698 | 4984.702 | 20.111 | 12.7 | 17.405 |
| ~season\* |  |  | 300 | 5297.112 | 20.363 | 7.18 | 17.892 |
| ~comname\*\*\* |  |  | 302 | 5337.683 | 21.659 | 6.47 | 17.791 |
| ~sex\* |  |  | 302 | 5598.228 | 22.567 | 1.90 | 18.660 |
| ~age |  |  | 300 | 5629.262 | 23.123 | 1.36 | 19.014 |