**SUPPLEMENTAL MATERIAL**

Summary of eastern subspecies song characteristics

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | | *G. t. campicola* | | *G. t.*  *trichas* | | *G. t.*  *ignota* |
|  | (n = 7) | | (n = 76) | | (n = 11) | |
| Minimal frequency (Hz) | 2630 | | 2483 | | 2143 | |
|  | ± 484 | | ± 359 | | ± 258 | |
| Maximal frequency (Hz) | 6655 | | 6453 | | 5544 | |
|  | ± 595 | | ± 760 | | ± 462 | |
| Peak frequency (Hz) | 4424 | | 4480 | | 4439 | |
|  | ± 674 | | ± 569 | | ± 374 | |
| Bandwidth (Hz) | 4025 | | 3968 | | 3401 | |
|  | ±313 | | ± 590 | | ± 434 | |
| Phrase duration (s) | 0.471 | | 0.523 | | 0.677 | |
|  | ± 0.08 | | ± 0.08 | | ± 0.08 | |
| Bandwidth per phrase | 8852 | | 7767 | | 5120 | |
| (Hz per s) | ± 2104 | | ± 1647 | | ± 1043 | |
| Mean note duration (s) | 0.124 | | 0.115 | | 0.101 | |
|  | ± 0.03 | | ± 0.02 | | ± 0.02 | |
| Mean internote duration | 0.056 | | 0.053 | | 0.042 | |
| (s) | ± 0.01 | | ± 0.01 | | ± 0.01 | |
| Mean notes per phrase | 2.71 | | 3.17 | | 4.82 | |
|  | ± 0.76 | | ± 0.62 | | ± 0.87 | |
| Mean elements per note | 1.99 | | 2.00 | | 1.67 | |
|  | ± 0.47 | | ± 0.52 | | ± 0.37 | |

Summary of western subspecies song characteristics

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | *G. t.*  *arizela* | *G. t.*  *campicola* | *G. t.*  *occidentalis* | *G. t.*  *scirpicola* | *G. t.*  *sinuosa* |
|  |  |  |  |  |  |
|  | (n = 4) | (n = 8) | (n = 7) | (n = 2) | (n = 3) |
| Minimal frequency (Hz) | 2334  ± 306 | 2417  ± 267 | 2323  ± 142 | 2041  ± 187 | 2450  ± 353 |
|  |  |  |  |  |  |
| Maximal frequency (Hz) | 7285  ± 979 | 7155  ± 744 | 6220  ± 572 | 7449  ± 463 | 7352  ± 187 |
|  |  |  |  |  |  |
| Peak frequency (Hz) | 5136  ± 802 | 4533  ± 732 | 4614  ± 606 | 4823  ± 487 | 5096  ± 431 |
|  |  |  |  |  |  |
| Bandwidth (Hz) | 4951  ± 1012 | 4739  ± 698 | 3898  ± 629 | 5408  ± 277 | 4902  ± 224 |
|  |  |  |  |  |  |
| Phrase duration (s) | 0.528  ± 0.09 | 0.545  ± 0.05 | 0.494  ± 0.08 | 0.449  ± 0.03 | 0.652  ± 0.06 |
|  |  |  |  |  |  |
| Mean note duration (s) | 0.118  ± 0.02 | 0.123  ± 0.04 | 0.119  ± 0.01 | 0.122  ± 0.04 | 0.120  ± 0.03 |
|  |  |  |  |  |  |
| Mean internote duration (s) | 0.058  ± 0.01 | 0.064  ± 0.01 | 0.064  ± 0.00 | 0.063  ± 0.02 | 0.079  ± 0.01 |
|  |  |  |  |  |  |
| Average notes per phrase | 3.00  ± 0 | 3.00  ± 0.53 | 2.71  ± 0.49 | 2.50  ± 0.71 | 3.33  ± 0.58 |
|  |  |  |  |  |  |
| Average elements per note | 2.58  ± 0.32 | 2.28  ± 0.38 | 2.45  ± 0.46 | 2.50  ± 0.71 | 2.78  ± 0.84 |
|  |  |  |  |  |  |