## APPENDIX

TABLE A-1
Mean Value, Sample Size, and Standard Deviation of the Hourly Metabolic Cost of Activity of Black-billed Magpies for Periods of Visual Contact During Each Composite DAY

| Phenological events | Month | $\bar{x}$ | $n$ | sD |
| :---: | :---: | :---: | :---: | :---: |
| Nonreproductive period |  |  |  |  |
| Molt | July | 1.79 | 17 | 0.34 |
|  | Aug. | 1.79 | 14 | 0.22 |
|  | Sept. | 2.11 | 17 | 0.52 |
| Nonmolt | Oct. | 2.86 | 29 | 1.07 |
|  | Nov. | 2.90 | 17 | 0.61 |
|  | Dec. | 3.07 | 18 | 0.68 |
| Reproductive period |  |  |  |  |
| Egg laying | Mar. $\%$ | 1.75 | 5 | 0.08 |
|  | Mar. ${ }^{\text {of }}$ | 1.89 | 12 | 0.07 |
| Incubating | Apr. $¢$ | 1.35 | 3 | 0.08 |
|  | May ${ }^{*}$ | 2.35 | 9 | 0.44 |
| Nestling | June $¢$ | 2.06 | 6 | 0.22 |
|  | June $\delta$ | 2.62 | 20 | 0.44 |

a Expressed as a multiple of the hourly cost of basal metabolism.

TABLE A-2
Paired $t$-tests Between Composite Days of the Hourly Metabolic Cost of Activity of Black-billed Magpies

| Composite days compared | 1 | $n+n-2$ | $p^{a}$ |
| :---: | :---: | :---: | :---: |
| Reproductive period |  |  |  |
| Males |  |  |  |
| Mar. ${ }^{\circ}$ with May ${ }^{\text {o }}$ | 3.592 | 19 | $0.01>P>0.001$ |
| Mar. ${ }^{\text {a }}$ with June of | 5.618 | 30 | $0.001>P$ |
| May ot with June ${ }^{\circ}$ | 1.519 | 27 | $0.2>P>0.1$ |
| Females |  |  |  |
| Mar. of with Apr. of | 6.847 | 7 | $0.001>P$ |
| Mar. $q$ with June $q$ | 2.969 | 9 | $0.02>P>0.01$ |
| Apr. $q$ with June $\varphi$ | 5.263 | 7 | $0.01>P>0.001$ |
| Males vs. females |  |  |  |
| Mar. q with Mar. © | 3.613 | 14 | $0.01>P>0.001$ |
| Apr. 9 with May ${ }^{\circ}$ | 3.796 | 10 | $0.01>P>0.001$ |
| June $¢$ with June of | 2.951 | 24 | $0.01>P>0.001$ |
| Nonreproductive period |  |  |  |
| JAS |  |  |  |
| Sept. with Aug. | 2.145 | 27 | $0.05>P>0.02$ |
| Sept. with July | 2.124 | 32 | $0.05>P>0.02$ |
| Aug. with July | 0.000 | 27 | $1.0>P>0.09$ |
| OND |  |  |  |
| Dec. with Nov. | 0.777 | 34 | $0.5>P>0.4$ |
| Dec. with Oct. | 0.743 | 45 | $0.5>P>0.4$ |
| Nov. with Oct. | 0.141 | 45 | $0.9>P>0.8$ |
| OND vs. JAS |  |  |  |
| Dec. with Sept. | 4.671 | 33 | $0.001>P$ |
| Dec. with Aug. | 6.752 | 28 | $0.001>P$ |
| Dec. with July | 6.977 | 33 | $0.001>P$ |
| Nov. with Sept. | 4.064 | 33 | $0.001>P$ |
| Nov. with Aug. | 6.455 | 28 | $0.001>P$ |
| Nov. with July | 6.553 | 33 | $0.001>P$ |
| Oct. with Sept. | 2.700 | 44 | $0.02>P>0.01$ |
| Oct. with Aug. | 3.682 | 39 | $0.001>P$ |
| Oct. with July. | 3.990 | 44 | $0.001>P$ |
| Nonreproductive vs. reproductive periods |  |  |  |
| JAS vs. males |  |  |  |
| July with June $\delta$ | 6.293 | 35 | $0.001>P$ |
| July with May is | 3.610 | 24 | $0.01>P>0.001$ |
| July with Mar. $\delta$ | 0.999 | 27 | $0.4>P>0.3$ |
| Aug. with June of | 6.442 | 30 | $0.001>P$ |
| Aug. with May os | 4.070 | 19 | $0.001>P$ |
| Aug. with Mar. \% | 1.507 | 22 | $0.2>P>0.1$ |
| Sept. with June $\delta$ | 3.219 | 35 | $0.01>P>0.001$ |
| Sept. with May of | 1.177 | 24 | $0.3>P>0.2$ |
| Sept. with Mar. \% | 1.449 | 27 | $0.27>P>0.1$ |
| JAS vs. females |  |  |  |
| July with June | 1.802 | 21 | $0.1>P>0.05$ |
| July with Apr. + | 2.184 | 18 | $0.05>P>0.02$ |
| July with Mar. © | 0.257 | 19 | $0.8>P>0.7$ |

TABLE A-2
Continued

| Composite days compared | $t$ | $n+n-2$ | $P^{\text {a }}$ |
| :---: | :---: | :---: | :---: |
| Aug. with June $q$ | 2.515 | 16 | $0.05>P>0.02$ |
| Aug. with Apr. i | 3.343 | 13 | $0.01>P>0.001$ |
| Aug. with Mar. of | 0.391 | 14 | $0.8>P>0.7$ |
| Sept. with June 9 | 0.226 | 21 | $0.9>P>0.8$ |
| Sept. with Apr. ${ }^{\text {g }}$ | 2.472 | 18 | $0.05>P>0.02$ |
| Sept. with Mar. ㅇ | 1.517 | 19 | $0.2>P>0.1$ |
| OND vs. males |  |  |  |
| Oct. with June ${ }^{\text {o }}$ | 0.946 | 47 | $0.4>P>0.3$ |
| Oct. with May ${ }^{\text {o }}$ | 1.383 | 36 | $0.2>P>0.1$ |
| Oct. with Mar. ${ }^{\text {o }}$ | 3.114 | 39 | $0.01>P>0.001$ |
| Nov. with June $\delta$ | 1.612 | 36 | $0.2>P>0.1$ |
| Nov. with May o | 2.386 | 25 | $0.05>P>0.02$ |
| Nov. with Mar. ${ }^{\text {o }}$ | 4.896 | 28 | $0.001>P$ |
| Dec. with June ${ }^{\circ}$ | 2.439 | 36 | $0.05>P>0.02$ |
| Dec. with May ${ }^{*}$ | 2.875 | 25 | $0.01>P>0.001$ |
| Dec. with Mar. ${ }^{*}$ | 5.955 | 28 | $0.001>P$ |
| OND vs. females |  |  |  |
| Oct. with June $q$ | 1.803 | 33 | $0.1>P>0.05$ |
| Oct. with Apr. it | 2.408 | 30 | $0.05>P>0.02$ |
| Oct. with Mar. \% | 2.289 | 31 | $0.05>P>0.02$ |
| Nov. with June 9 | 3.257 | 22 | $0.01>P>0.001$ |
| Nov. with Apr. ${ }^{\text {c }}$ | 4.299 | 19 | $0.001>P$ |
| Nov. with Mar. $\frac{7}{}$ | 4.134 | 20 | $0.001>P$ |
| Dec. with June $q$ | 3.530 | 22 | $0.01>P>0.001$ |
| Dec. with Apr. 9 | 4.285 | 19 | $0.001>P$ |
| Dec. with Mar. $\%$ | 4.261 | 20 | $0.001>P$ |

[^0]
[^0]:    ${ }^{a} P$ of a two tailed test.

