**Supplementary File 1**

**Urbanization processes drive divergence at the Major Histocompatibility Complex in a common waterbird**

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**Table S1** Microsatellite loci used to assess neutral variation in the Eurasian coot. Repeat unit size, size range, number of alleles, observed heterozygosity (Ho) and expected heterozygosity (He) are reported for each marker.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Locus | Forward primer  sequences (5’–3’) | Reverse primer  sequences (5’–3’) | Repeat unit size (bp) | Size range (bp) | N alleles | Ho | He |
| Tm18 | CTGAACATTTCAAGAGTCCTCA | GCAGAGCTGACCACTCAGAAC | 2 | 137-149 | 3 | 0.703 | 0.539 |
| Tm20 | TGCACAGATGAGAAGGAGGGC | GCCTGCTCACACTAGCAGAAC | 2 | 127-133 | 3 | 0.090 | 0.085 |
| Tm27 | CTAGGTCACCTTTACAGTAGTC | CAATACCATGTATAGAAATGTTGG | 2 | 131-173 | 17 | 0.836 | 0.846 |
| Tm38 | GATAGATGGAGCGTAAAATGCA | AAGAAAGCAAAATGTCTGTATTGG | 2 | 103-113 | 6 | 0.504 | 0.511 |
| Kira8 | GCTTTGCATCTTGCCTTAAA | GTGACACTGATACAGTGTGCCT | 2 | 307-331 | 16 | 0.879 | 0.901 |
| Kira9 | TGATCTGGGCAGGCTTCTAC | GTCGAATAATGGCAGCAATG | 2 | 163-173 | 5 | 0.520 | 0.499 |
| Kira10 | CCAAGTACCATCTGCGAAGC | AACCCGAACGAGAGATGTGA | 2 | 121-145 | 12 | 0.785 | 0.774 |
| Kira16 | CCAGGTGAAACTCTGCATT | ACAGTTGTGATGTGGCTGGA | 2 | 299-419 | 48 | 0.858 | 0.930 |
| B106 | TAGTGCTCTCAGGAAAGACTTG | CTCTTCCAGAAGCTGTAGTTG | 2 | 168-204 | 15 | 0.777 | 0.788 |
| TG03002 | TCTTGCCTTTTTGGTATGAGTAT | TACAAAGCACTGTGGAGCAG | 2 | 118-126 | 5 | 0.265 | 0.257 |

**Table S2** Measures of MHC class II diversity in old urban (Warszawa), new urban (Łódź) and two rural (Sarnów and Żeromin) populations of the Eurasian coot. Estimates given in parentheses were standardized for a population size of 20 individuals using rarefaction.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Population | No. individuals | No. alleles | No. private alleles | No. segregating sites | No. nucleotide differences | Nucleotide diversity |
| Warszawa | 26 (20) | 27 (23) | 14 (12) | 93 (90) | 32.4 (32.5) | 0.121 (0.122) |
| Łódź | 30 (20) | 37 (27) | 14 (8) | 93 (90) | 31.2 (32.0) | 0.117 (0.119) |
| Sarnów | 27 (20) | 52 (41) | 30 (22) | 96 (93) | 31.3 (32.5) | 0.117 (0.122) |
| Żeromin | 20 (20) | 44 (44) | 24 (24) | 92 (92) | 31.4 (31.4) | 0.118 (0.118) |

**Table S3** Measures of microsatellite diversity in old urban (Warszawa), new urban (Łódź) and two rural (Sarnów and Żeromin) populations of the Eurasian coot. Estimates given in parentheses were standardized for a population size of 20 individuals using rarefaction.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Population | No. individuals | No. alleles | No. private alleles | Observed heterozygosity (Ho) |
| Warszawa | 26 (20) | 76 (70) | 8 (8) | 0.585 (0.580) |
| Łódź | 30 (20) | 88 (78) | 13 (11) | 0.637 (0.655) |
| Sarnów | 27 (20) | 88 (82) | 13 (11) | 0.611 (0.635) |
| Żeromin | 20 (20) | 75 (75) | 7 (9) | 0.655 (0.655) |