**Supplementary material for**

**Long term vs short term impact of founder relatedness on gene diversity and inbreeding within the European Endangered Species Programme (EEP) for the Nepalese red panda (*Ailurus f. fulgens*)**

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1. **Census graph**

Figure 1 – Number of individuals kept in the Red Panda EEP

1. **Founder Relationship Scenarios**

**2.1 Scenario 2**

Table 1 - Founders clustered in six groups on base of their arrival in captivity

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Source Population | Individual (Stdb #) | Sire | Dam | Sex |
| 1 | 6601 | F1 | F2 | male |
| 2 | 6602 | F3 | F4 | female |
| 2 | 6701 | F3 | F4 | male |
| 2 | 6905 | F3 | F4 | male |
| 3 | 7102 | F5 | F6 | male |
| 3 | 7103 | F5 | F6 | female |
| 3 | 7106 | F5 | F6 | female |
| 4 | 7302 | F7 | F8 | male |
| 4 | 7303 | F7 | F8 | female |
| 4 | 7309 | F7 | F8 | female |
| 4 | 7310 | F7 | F8 | male |
| 5 | 7314 | F9 | F10 | female |
| 4 | 7315 | F7 | F8 | male |
| 5 | 7316 | F9 | F10 | male |
| 4 | 7319 | F7 | F8 | male |
| 3 | 7322 | F5 | F6 | female |
| 5 | 7502 | F9 | F10 | male |
| 5 | 7503 | F9 | F10 | female |
| 5 | 7512 | F9 | F10 | male |
| 4 | 7522 | F7 | F8 | female |
| 4 | 7523 | F7 | F8 | male |
| 6 | 8421 | F11 | F12 | male |
| 6 | 8422 | F11 | F12 | female |
| 1 | F1 | 0 | 0 | male |
| 5 | F10 | 0 | 0 | female |
| 6 | F11 | 0 | 0 | male |
| 6 | F12 | 0 | 0 | female |
| 1 | F2 | 0 | 0 | female |
| 2 | F3 | 0 | 0 | male |
| 2 | F4 | 0 | 0 | female |
| 3 | F5 | 0 | 0 | male |
| 3 | F6 | 0 | 0 | female |
| 4 | F7 | 0 | 0 | male |
| 4 | F8 | 0 | 0 | female |
| 5 | F9 | 0 | 0 | male |

**2.2 Scenario 3**

Table 2 – Founders clustered in eight groups on base of the region/country to which they were imported

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Source Population | Individual (Stdb #) | Sire | Dam | Sex |
| 2 | 6601 | F3 | F4 | male |
| 3 | 6602 | F5 | F6 | female |
| 3 | 6701 | F5 | F6 | male |
| 4 | 6905 | F7 | F8 | male |
| 5 | 7102 | F9 | F10 | male |
| 5 | 7103 | F9 | F10 | female |
| 4 | 7106 | F7 | F8 | female |
| 6 | 7302 | F11 | F12 | male |
| 6 | 7303 | F11 | F12 | female |
| 5 | 7309 | F9 | F10 | female |
| 5 | 7310 | F9 | F10 | male |
| 7 | 7314 | F13 | F14 | female |
| 7 | 7315 | F13 | F14 | male |
| 7 | 7316 | F13 | F14 | male |
| 4 | 7319 | F7 | F8 | male |
| 4 | 7322 | F7 | F8 | female |
| 8 | 7502 | F15 | F16 | male |
| 8 | 7503 | F15 | F16 | female |
| 5 | 7512 | F9 | F10 | male |
| 2 | 7522 | F3 | F4 | female |
| 2 | 7523 | F3 | F4 | male |
| 1 | 8421 | F1 | F2 | male |
| 1 | 8422 | F1 | F2 | female |
| 1 | F1 | 0 | 0 | male |
| 1 | F2 | 0 | 0 | female |
| 2 | F3 | 0 | 0 | male |
| 2 | F4 | 0 | 0 | female |
| 3 | F5 | 0 | 0 | male |
| 3 | F6 | 0 | 0 | female |
| 4 | F7 | 0 | 0 | male |
| 4 | F8 | 0 | 0 | female |
| 5 | F9 | 0 | 0 | male |
| 5 | F10 | 0 | 0 | female |
| 6 | F11 | 0 | 0 | male |
| 6 | F12 | 0 | 0 | female |
| 7 | F13 | 0 | 0 | male |
| 7 | F14 | 0 | 0 | female |
| 8 | F15 | 0 | 0 | male |
| 8 | F16 | 0 | 0 | female |

**2.3 Scenario 4**

Table 3 – Complex founder relationship

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Source Population | Individual (Stdb #) | Sire | Dam | Sex |
| 3 | 6601 | F21 | F22 | male |
| 1 | 6602 | F6 | F5 | female |
| 1 | 6701 | F6 | F7 | male |
| 3 | 6905 | F23 | F24 | male |
| 1 | 7102 | F8 | F9 | male |
| 1 | 7103 | F8 | F9 | female |
| 3 | 7106 | F25 | F26 | female |
| 4 | 7302 | F29 | F30 | male |
| 4 | 7303 | F29 | F30 | female |
| 4 | 7309 | F31 | F32 | female |
| 4 | 7310 | F31 | F32 | male |
| 4 | 7314 | F33 | F34 | female |
| 4 | 7315 | F29 | F30 | male |
| 4 | 7316 | F33 | F34 | male |
| 3 | 7319 | F18 | F19 | male |
| 3 | 7322 | F27 | F28 | female |
| 2 | 7502 | F16 | F17 | male |
| 2 | 7503 | F16 | F17 | female |
| 4 | 7512 | F35 | F30 | male |
| 2 | 7522 | F12 | F13 | female |
| 2 | 7523 | F12 | F13 | male |
| 1 | 8421 | F1 | F2 | male |
| 1 | 8422 | F1 | F2 | female |
| 1 | F1 | 0 | 0 | male |
| 1 | F10 | 0 | 0 | male |
| 1 | F11 | 0 | 0 | female |
| 2 | F12 | F14 | F15 | male |
| 2 | F13 | F16 | F17 | female |
| 2 | F14 | 0 | 0 | male |
| 2 | F15 | 0 | 0 | female |
| 2 | F16 | 0 | 0 | male |
| 2 | F17 | 0 | 0 | female |
| 3 | F18 | 0 | 0 | male |
| 3 | F19 | 6905 | F20 | female |
| 1 | F2 | F3 | F4 | female |
| 3 | F20 | 0 | 0 | female |
| 3 | F21 | 0 | 0 | male |
| 3 | F22 | F27 | F28 | female |
| 3 | F23 | F25 | F26 | male |
| 3 | F24 | 0 | 0 | female |
| 3 | F25 | F27 | F28 | male |
| 3 | F26 | 0 | 0 | female |
| 3 | F27 | 0 | 0 | male |
| 3 | F28 | 0 | 0 | female |
| 4 | F29 | 0 | 0 | male |
| 1 | F3 | 0 | 0 | male |
| 4 | F30 | F36 | F37 | female |
| 4 | F31 | 0 | 0 | male |
| 4 | F32 | F36 | F37 | female |
| 4 | F33 | F36 | F37 | male |
| 4 | F34 | 0 | 0 | female |
| 4 | F35 | F33 | F34 | male |
| 4 | F36 | 0 | 0 | male |
| 4 | F37 | 0 | 0 | female |
| 1 | F4 | F8 | F9 | female |
| 1 | F5 | 0 | 0 | female |
| 1 | F6 | F10 | F11 | male |
| 1 | F7 | 0 | 0 | female |
| 1 | F8 | F10 | F11 | male |
| 1 | F9 | 0 | 0 | female |