This is the supplemental version of the paper.

This version of the publication may differ from the final published version.

Permanent repository link: http://openaccess.city.ac.uk/16745/

Link to published version: http://dx.doi.org/10.1002/jmor.20317

Copyright and reuse: City Research Online aims to make research outputs of City, University of London available to a wider audience. Copyright and Moral Rights remain with the author(s) and/or copyright holders. URLs from City Research Online may be freely distributed and linked to.
Fig. 2

Fig. 3
Fig. 4

F. peregrinus

C. livia

F. tinnunculus

A. nisus

Fig. 4
Fig. 7

E-Modulus of Primary 1, 5 and 10 in *F. peregrinus*

**A**

Primary 10

- *F. peregrinus*
- *C. livia*
- *F. tinnunculus*
- *A. nisus*

E-Modulus (GPa)

Tail feather

Alula

Section number

Fig. 7
Fig. 8
Fig. 11

Specific bending stiffness (Nmm)

Primary 10  Tail feather  Alula

transverse

lateral

dorso-ventral

body mass (g)
Table 1: Data of the evaluated feathers

In each species we investigated two males and two females. As in *F.peregrinus* sexual dimorphic differences in the weight were considerable therefore we plotted both sexes separately. For the wing we evaluated feathers of both body sides and for the tail we evaluated the two central feathers. If possible, mean and S.D. are given.

<table>
<thead>
<tr>
<th></th>
<th><em>F.peregrinus</em> males</th>
<th><em>F.peregrinus</em> females</th>
<th><em>C.livia</em></th>
<th><em>F.tinnunculus</em></th>
<th><em>A. nisus</em></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mass (g)</strong></td>
<td>567.5 (±24.7)</td>
<td>794 (±53.5)</td>
<td>482.5 (±4.61)</td>
<td>191.8 (±17.7)</td>
<td>200.2 (±4.8)</td>
</tr>
<tr>
<td><strong>Length of the rachis (cm)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary 10</td>
<td>20.7 (±0.28)</td>
<td>23.05 (±0.07)</td>
<td>14.65 (±0.12)</td>
<td>17.95 (±0.96)</td>
<td>8.94 (±0.13)</td>
</tr>
<tr>
<td>Tail feather</td>
<td>14.5 (±0.05)</td>
<td>16.6 (±0.08)</td>
<td>10.9 (±0.06)</td>
<td>16.06 (±0.35)</td>
<td>15.9 (±0.11)</td>
</tr>
<tr>
<td>Alula</td>
<td>7.75 (±0.06)</td>
<td>8.23 (±0.1)</td>
<td>5.03 (±0.06)</td>
<td>6.92 (±0.07)</td>
<td>7.45 (±0.33)</td>
</tr>
<tr>
<td><strong>Length * body mass</strong> (mm g⁻¹)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary 10</td>
<td>0.36</td>
<td>0.29</td>
<td>0.30</td>
<td>0.94</td>
<td>0.45</td>
</tr>
<tr>
<td>Tail feather</td>
<td>0.26</td>
<td>0.23</td>
<td>0.23</td>
<td>0.84</td>
<td>0.79</td>
</tr>
<tr>
<td>Alula</td>
<td>0.14</td>
<td>0.10</td>
<td>0.10</td>
<td>0.36</td>
<td>0.37</td>
</tr>
</tbody>
</table>