Supplementary material
APPENDIX 1

Figure A1. Custom-made down rinsing machine at King Eider Co., Ltd. (Stykkishólmur, Iceland) used in this study to thoroughly clean down samples.

Figure A2. Custom-made, piston-cylinder device (Skipavík, Stykkishólmur, Iceland) to measure fill power of down samples.
Figure A3. Scanning electron micrograph of Greylag Goose (*Anser anser*) plumule barbules showing expanded nodes interlocking 2 or 3 barbules together at various contact points. Scale bar 10µm.
Figure A4. Scanning electron micrograph of Common Eider (*Somateria mollissima*) plumule barbules showing pronged nodes interlocking 2 barbules together. Scale bar 10µm.