

# The impact of domestication process on eggshell microstructure in *Gallus gallus*, *Anser anser* and *Anas platyrhynchos*

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The authors are fully responsible for both the content and the formal aspects of the electronic supplementary material. No editorial adjustments were made.

## Electronic Supplementary Material (ESM)

Figure S1. Example SEM photographs of the mammillary layer of the ancestor and domesticated forms of *Gallus gallus*

Figure S2. Example SEM photographs of the mammillary layer of the ancestor and domesticated forms of *Anser anser*

Figure S3. Example SEM photographs of the mammillary layer of the ancestor and domesticated forms of *Anas platyrhynchos*

Table S1. Two-way ANOVA (factors: 'species' and 'domestication', dependent effect: knob area, *n* knobs, coverage inner surface with knobs, mean thickness of palisade and crystalline layer, mean thickness of mammillary layer, palisade to mammillary layer ratio)



Figure S1. Example SEM photographs of the mammillary layer of the ancestor and domesticated forms of *Gallus gallus*

Each photo panel is labeled with the breed/line it refers to

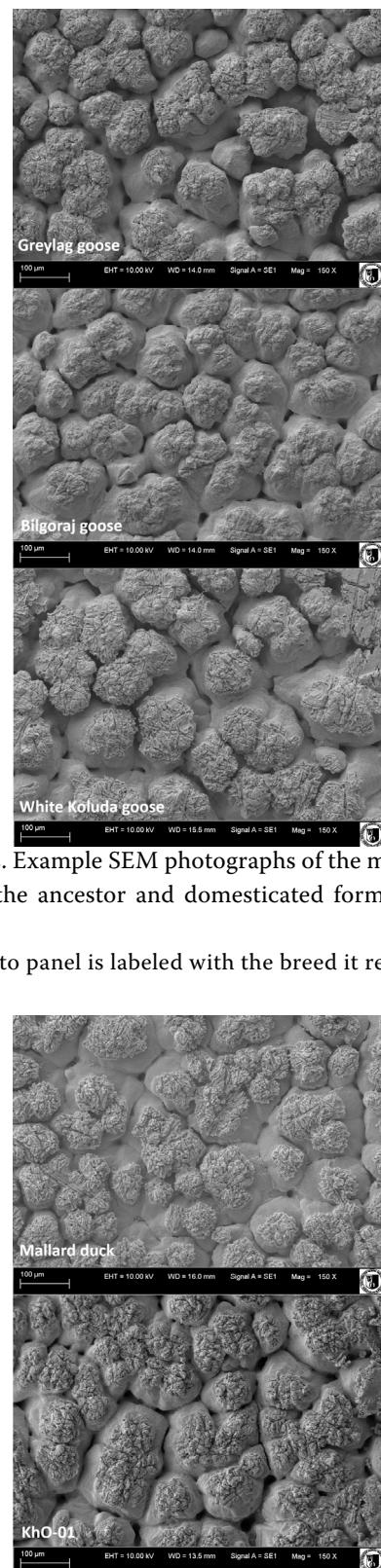


Figure S2. Example SEM photographs of the mammillary layer of the ancestor and domesticated forms of *Anser anser*

Each photo panel is labeled with the breed it refers to



Figure S3. Example SEM photographs of the mammillary layer of the ancestor and domesticated forms of *Anas platyrhynchos*

Each photo panel is labeled with the breed/line it refers to

Table S1. Two-way ANOVA (factors: 'species' and 'domestication', dependent effect: knob area,  $n$  knobs, coverage inner surface with knobs, mean thickness of palisade and crystalline layer, mean thickness of mammillary layer, palisade to mammillary layer ratio)

| Effect   | F         | P-value | Partial $\eta^2$ |
|--|-----------|---------|------------------|
| Knob area ( $\mu\text{m}^2$ )                                      |           |         |                  |
| Intercept  | 36 578.27 | <0.001  | 0.86             |
| Species  | 995.11    | <0.001  | 0.25             |
| Domestication  | 360.66    | <0.001  | 0.06             |
| Species $\times$ domestication                                     | 143.51    | <0.001  | 0.05             |
| $n$ knobs per $\text{mm}^2$  |           |         |                  |
| Intercept  | 3 699.33  | <0.001  | 0.92             |
| Species  | 138.46    | <0.001  | 0.46             |
| Domestication  | 5.21      | 0.023   | 0.02             |
| Species $\times$ domestication                                     | 0.33      | 0.718   | 0.002            |
| Coverage inner surface with knobs (%)                              |           |         |                  |
| Intercept  | 26 650.06 | <0.001  | 0.99             |
| Species  | 24.95     | <0.001  | 0.13             |
| Domestication  | 17.73     | <0.001  | 0.05             |
| Species $\times$ domestication                                     | 4.28      | 0.015   | 0.03             |
| Mean thickness of palisade and crystalline layer ( $\mu\text{m}$ ) |           |         |                  |
| Intercept  | 17 224.08 | <0.001  | 0.97             |
| Species  | 989.66    | <0.001  | 0.77             |
| Domestication  | 69.47     | <0.001  | 0.10             |
| Species $\times$ domestication                                     | 33.37     | <0.001  | 0.10             |
| Mean thickness of mammillary layer ( $\mu\text{m}$ )               |           |         |                  |
| Intercept  | 8 685.53  | <0.001  | 0.94             |
| Species  | 885.55    | <0.001  | 0.75             |
| Domestication  | 2.53      | 0.112   | 0.004            |
| Species $\times$ domestication                                     | 23.92     | <0.001  | 0.07             |
| Palisade to mammillary layer ratio                                 |           |         |                  |
| Intercept  | 7 351.82  | <0.001  | 0.93             |
| Species  | 46.68     | <0.001  | 0.14             |
| Domestication  | 15.33     | <0.001  | 0.03             |
| Species $\times$ domestication                                     | 4.09      | 0.017   | 0.01             |