

**Appendix 3**—Measured maximum diameter (D), intermediate diameter (I), height (H), mass ( $m$ ), submerged mass ( $m_s$ ), density ( $\rho$ ), and

Goose							
No.	D (mm)	I (mm)	H (mm)	$m$ (g)	$m_s$ (g)	$\rho$ (g/cm <sup>3</sup> )	$v$ (cm <sup>3</sup> )
1	44.0	40.6	10.6	1.887	1.123	2.470	0.764
2	37.3	27.6	7.5	1.127	0.674	2.488	0.453
3	40.9	15.9	9.3	1.062	0.635	2.487	0.427
4	35.2	30.2	4.6	1.070	0.644	2.512	0.426
5	40.5	34.1	5.9	1.271	0.767	2.522	0.504
6	41.7	28.0	9.0	1.290	0.773	2.495	0.517
7	32.9	22.8	4.1	0.906	0.545	2.510	0.361
8	30.9	15.6	5.1	0.474	0.284	2.495	0.190
9	26.7	19.5	2.9	0.544	0.327	2.507	0.217
10	31.5	17.3	2.6	0.441	0.265	2.506	0.176
11	28.0	25.1	5.5	0.677	0.406	2.498	0.271
12	33.6	25.3	8.7	1.018	0.612	2.507	0.406
13	24.6	15.6	2.4	0.335	0.200	2.481	0.135
14	23.3	17.1	2.9	0.358	0.217	2.539	0.141
15	16.8	11.3	1.4	0.205	0.121	2.440	0.084
16	22.6	17.8	4.4	0.384	0.228	2.462	0.156
17	19.2	18.0	2.1	0.371	0.221	2.473	0.150
18	17.3	9.5	1.5	0.202	0.122	2.525	0.080
19	10.1	5.9	1.1	0.070	0.042	2.509	0.028
20	13.7	7.5	1.5	0.116	0.070	2.505	0.046
21	11.2	10.2	1.2	0.102	0.061	2.470	0.041
22	14.9	8.6	1.4	0.156	0.093	2.464	0.063
23	14.1	12.4	1.3	0.137	0.082	2.500	0.055
24	11.1	7.4	1.1	0.077	0.046	2.476	0.031

Emu							
No.	D (mm)	I (mm)	H (mm)	$m$ (g)	$m_s$ (g)	$\rho$ (g/cm <sup>3</sup> )	$v$ (cm <sup>3</sup> )
1	43.5	36.2	6.4	2.235	1.369	2.581	0.866
2	44.1	19.8	5.2	1.464	0.900	2.596	0.564
3	41.8	27.4	3.9	1.577	0.969	2.594	0.608
4	36.4	27.3	6.6	1.692	1.037	2.583	0.655
5	36.0	21.7	5.1	1.302	0.799	2.588	0.503
6	37.4	20.4	4.4	1.253	0.767	2.578	0.486
7	25.6	15.0	1.9	0.587	0.359	2.575	0.228
8	39.4	36.0	5.2	2.272	1.393	2.585	0.879
9	30.0	28.7	3.6	0.923	0.568	2.600	0.355
10	33.1	25.7	3.2	1.101	0.680	2.615	0.421
11	25.7	17.4	2.4	0.685	0.422	2.605	0.263
12	28.1	18.1	2.9	0.878	0.542	2.613	0.336
13	22.5	19.6	1.9	0.558	0.343	2.595	0.215
14	19.4	11.2	1.2	0.268	0.164	2.577	0.104
15	17.9	10.5	1.4	0.237	0.146	2.604	0.091
16	23.5	18.2	2.2	0.627	0.384	2.580	0.243
17	16.2	12.9	1.2	0.290	0.179	2.613	0.111
18	20.6	12.1	1.6	0.455	0.279	2.585	0.176
19	13.9	8.6	1.1	0.160	0.098	2.581	0.062
20	32.2	21.1	3.1	1.046	0.641	2.583	0.405
21	10.2	9.3	1.1	0.100	0.062	2.597	0.039
22	11.7	8.4	1.1	0.142	0.088	2.606	0.055
23	14.9	11.6	1.2	0.222	0.137	2.612	0.085
24	13.6	12.9	1.1	0.199	0.123	2.618	0.076

l volume (v) of each eggshell sample used in the study

Ostrich

No.	D (mm)	I (mm)	H (mm)	<i>m</i> (g)	<i>m<sub>s</sub></i> (g)	$\rho$ (g/cm <sup>3</sup> )	v (cm <sup>3</sup> )
1	41.4	28.9	4.8	3.730	2.293	2.596	1.437
2	38.5	27.8	4.9	3.041	1.869	2.595	1.172
3	40.6	20.6	6.0	2.415	1.480	2.583	0.935
4	37.2	16.2	3.8	1.833	1.128	2.600	0.705
5	42.1	23.6	5.7	3.194	1.967	2.603	1.227
6	36.1	18.0	4.5	2.131	1.314	2.608	0.817
7	32.3	15.5	4.3	1.561	0.958	2.589	0.603
8	29.2	19.0	3.4	1.540	0.944	2.584	0.596
9	32.7	18.6	3.1	1.635	1.009	2.612	0.626
10	27.2	26.1	3.1	1.748	1.080	2.617	0.668
11	28.5	18.5	3.2	1.635	1.004	2.591	0.631
12	33.0	23.5	4.1	2.796	1.725	2.611	1.071
13	20.0	15.0	2.7	0.682	0.418	2.583	0.264
14	19.0	12.8	2.6	0.681	0.415	2.560	0.266
15	21.7	18.6	2.4	1.189	0.732	2.602	0.457
16	21.8	11.9	2.3	0.819	0.502	2.584	0.317
17	25.1	17.1	2.7	1.446	0.886	2.582	0.560
18	23.3	18.0	3.0	1.470	0.906	2.606	0.564
19	14.9	13.0	2.5	0.501	0.311	2.637	0.190
20	18.3	8.2	2.3	0.396	0.242	2.571	0.154
21	13.4	9.0	2.5	0.354	0.220	2.642	0.134
22	17.4	11.3	2.6	0.479	0.294	2.589	0.185
23	11.8	9.2	2.0	0.313	0.192	2.587	0.121
24	15.4	9.8	2.0	0.419	0.257	2.586	0.162