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Monitoring of genetic diversity in autochthonous Czech poultry breeds assessed by genealogical data

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Electronic Supplementary Material (ESM)

Table S1A. Marginal genetic contributions of the ten most influential ancestors of Czech Golden Spotted Hen (CGSH) breed

Table S1B. Marginal genetic contributions of the ten most influential ancestors of Czech White Goose (CWG) and Czech Crested Goose (CCG) breeds

Figure S1. Number of animals registered in the studbook per year of birth – Czech Golden Spotted Hen (CGSH), Czech White Goose (CWG) and Czech Crested Goose (CCG)

Figure S2. Completeness of pedigree information across generations for the Czech Golden Spotted Hen (CGSH), the Czech White Goose (CWG) and the Czech Crested Goose (CCG)

Figure S3. Mean inbreeding coefficients across years of birth in Czech Golden Spotted Hen (CGSH), the Czech White Goose (CWG) and the Czech Crested Goose (CCG) according to classical inbreeding (F_X) and new inbreeding (F_{new}) between the birth years of 2005 and 2018

Figure S4. Genetic diversity loss due to unequal founder contributions and random genetic drift (A), unequal founder contributions (B), and random genetic drift (C) in the evaluated breeds

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Table S1A. Marginal genetic contributions of the ten most influential ancestors of Czech Golden Spotted Hen (CGSH) breed

CGSH				
ID	Con.	No desc.	Sex	YOB
794	0.097 8	35	M	2015
959	0.052 9	15	M	2013
1 416	0.048 9	16	M	2013
1 106	0.048 8	26	M	2012
539	0.048 0	18	M	2014
1 740	0.045 2	12	M	2016
1 371	0.033 6	11	M	2013
275	0.032 2	3	M	2015
1 598	0.031 7	11	M	2016
854	0.029 7	12	M	2009

Con = contribution; ID = identification number of animal; M = male; No desc. = number of descendants; YOB = year of birth

Table S1B. Marginal genetic contributions of the ten most influential ancestors of Czech White Goose (CWG) and Czech Crested Goose (CCG) breeds

CWG					CCG				
ID	Con.	No desc.	Sex	YOB	ID	Con.	No desc.	Sex	YOB
184	0.078 3	9	F	2004	181	0.091 1	5	M	2003
202	0.053 6	9	F	2006	59	0.079 0	10	F	2005
55	0.044 0	2	F	2005	183	0.062 1	5	F	2004
176	0.041 9	7	F	–	205	0.061 6	4	F	2006
233	0.036 4	2	F	2011	38	0.059 9	3	F	2004
278	0.035 7	5	F	–	282	0.054 7	3	M	2004
178	0.035 4	7	F	2000	14	0.053 0	1	M	2002
204	0.022 7	9	M	2004	87	0.044 3	2	F	2007
186	0.021 5	7	F	2004	58	0.043 4	4	F	2015
240	0.020 9	5	F	2013	72	0.043 4	2	F	2006

Con = contribution; F = female; ID = identification number of animal; M = male; No desc. = number of descendants; YOB = year of birth

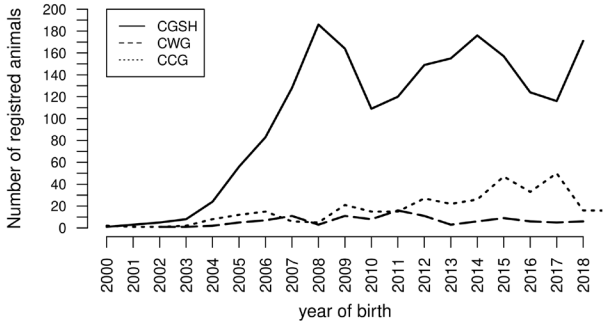

Figure S1. Number of animals registered in the studbook per year of birth – Czech Golden Spotted Hen (CGSH), Czech White Goose (CWG) and Czech Crested Goose (CCG)

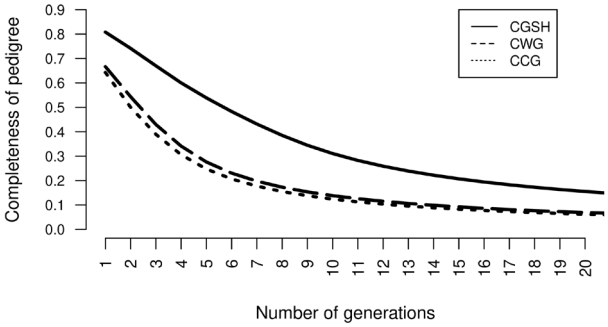

Figure S2. Completeness of pedigree information across generations for the Czech Golden Spotted Hen (CGSH), the Czech White Goose (CWG) and the Czech Crested Goose (CCG)

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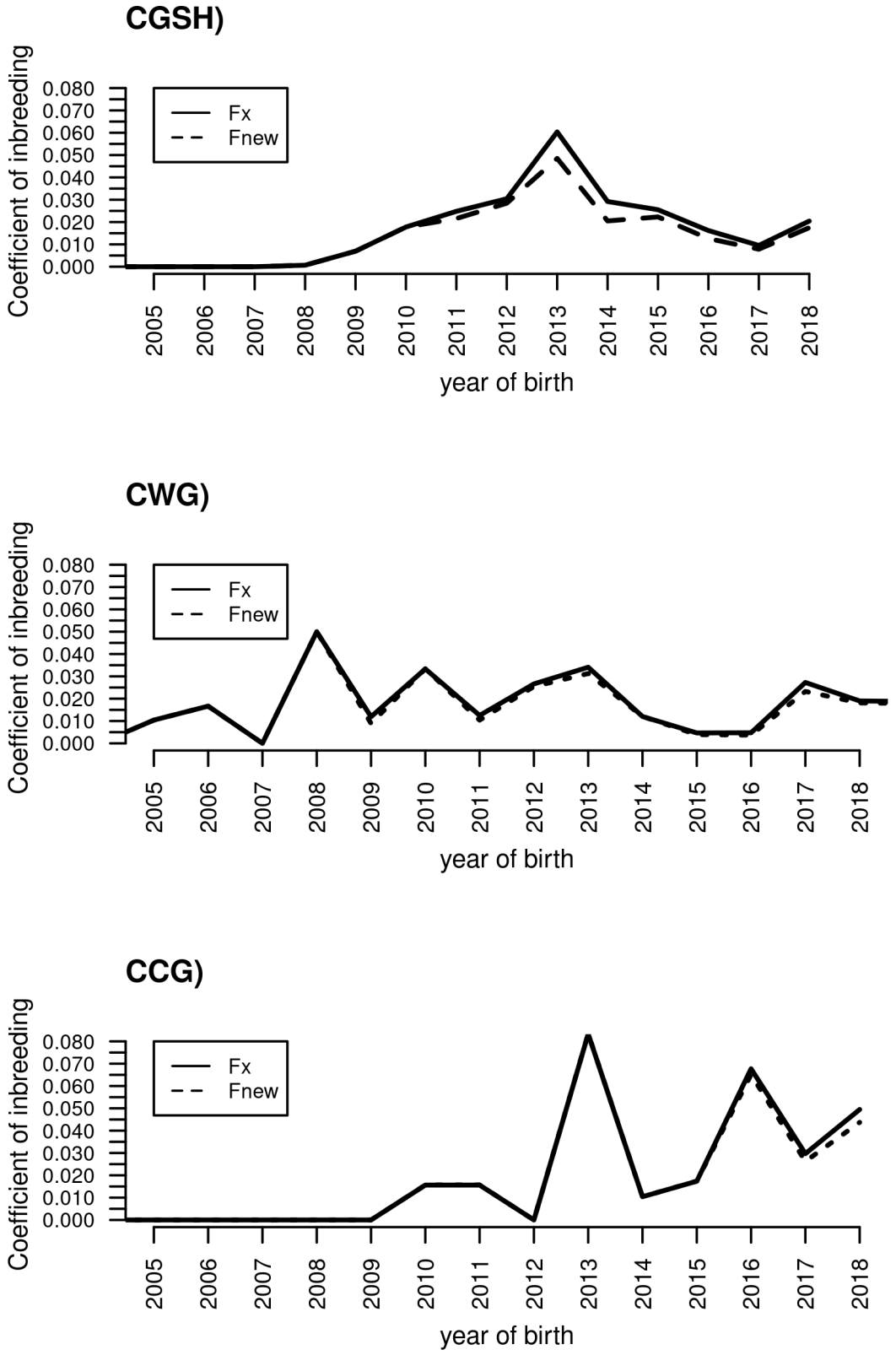

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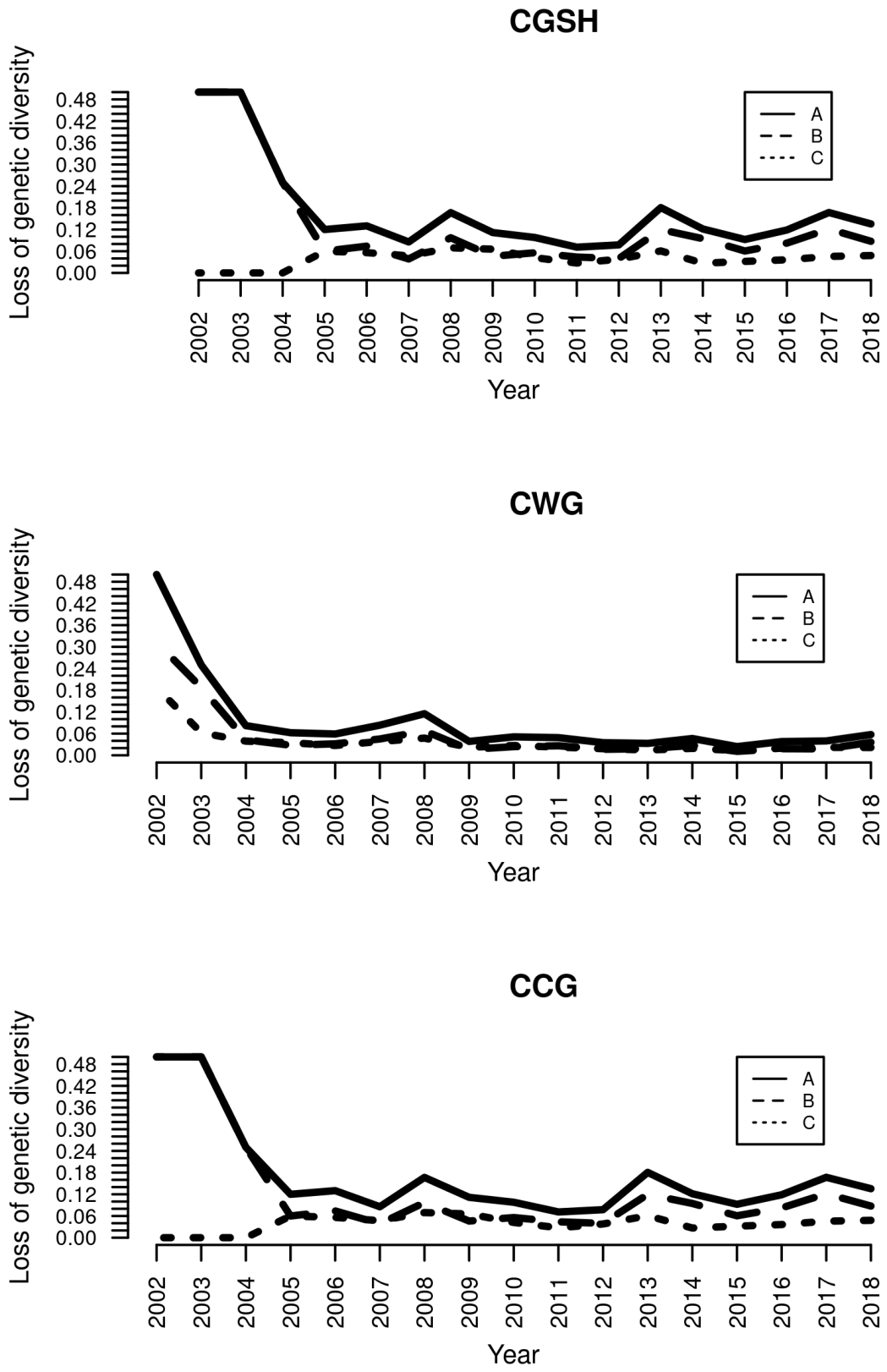

Figure S4. Genetic diversity loss due to unequal founder contributions and random genetic drift (A), unequal founder contributions (B), and random genetic drift (C) in the evaluated breeds

CCG = Czech Crested Goose; CGSH = Czech Golden Spotted Hen; CWG = Czech White Goose