Table 2.1 Stock information

Category Stock name and description	Origin and history	Breed	Genetic characteristics	Allele symbol	Status	Number of birds	Cryo-preserv.	Available	Curator
Chicken									
Bloodtype-Gene pool									
Auburn DAX MHC: *B5*; other erythrocyte alloantigens: *A/E4*, *C4*, *D3*, *H2*, *I3*, *K3*, *P3*, *"Q"2*.	Kept as closed flock since 1965	SCWL		see description	Fair	240	No	With collaboration	**Ewald**
NIU B haplotypes Pool of MHC B-haplotypes: *1*, *3*, *4*, *6*, *8*, *10*, *11*, *12*, *13*, *14*, *15*, *17*, *22*, *23*, *24*, *26*, *30*, *31*, *32*, *33*, *24r1*, *2r1*, *2r2*, *2r3*, *21r1*, *21r2*, *2r4*, *2r5*, *24r2*, *24r3*, *21r6*, *8r1*.	Derived from Ancona synthetic stocks homozygous for most non-MHC genes	Mixed Ancona		see description	Fair	N/A	No	With collaboration	**Briles**
NIU B-haplotype Recombinants Recombinant B haplotypes: *R1*, *R2*, *R3*, *R4*, *R5*, *R6*, *R7*, *R8*, *R9*, *R10*, *R11*, *R12*.	Derived from Ancona synthetic stocks homozygous for non-MHC system genes	Mixed Ancona		see description	Fair	N/A	No	With collaboration	**Briles**
NIU Male Breeder Alloantigen Reservoir Pool of cell surface erythrocyte alloantigen (# alleles): *A*(8), *B*(40), C(8), *D*(5), *E*(10), *H*(2), *I*(7), *K*(2), *L*(2), *P*(10), *R*(2); Leukocyte alloantigens: *M*(5), *N*(2), *Q*(3), *T*(3), *U*(4), *W*(2), *Z*(2).	Segregating for erythrocyte and leucocyte alloantigens	SCWL		see description	Fair	200+	No	With collaboration	**Briles**
NIU Segregating Male Breeder Line MHC: *B2/B5* or *B19/B21*; *A4E1/A5E2*; *C2/C5*; *D1/D3*; *H1/H2*; *I2/I8*; *K2/K3*; *L1/L2*; *P1/P4*.		SCWL		see description	Fair	N/A	No	With collaboration	**Briles**
UNH 105 Closed flock with four MHC B haplotypes: *22*, *23*, *24*, *26*.	Kept as closed flock since 1981	New Hampshire		see description	Good	10M/150F	No	Yes	**Taylor**
Bloodtype-MHC									
Auburn M MHC: *B8*.	Derived from commercial meat stock in 1982	Commercial meat stocks		*B8*	Fair	35	No	No (proprietary)	**Ewald**
Auburn N MHC: *B13*.	Derived from commercial meat stock in 1982	Commercial meat stocks		*B13*	Fair	100	No	No (proprietary)	**Ewald**
Auburn RM MHC: *B2*.	Cross of Auburn R and Auburn M stocks	SCWL X commercial meat stocks		*B2*	Good	70	No	With collaboration	**Ewald**
Auburn RMH MHC: *B3*.	Derived from cross of Auburn R and Auburn MH stocks	SCWL		*B3*	Fair	50	No	With collaboration	**Ewald**
Auburn RN MHC: *B13*.	Derived from cross of Auburn R and Auburn N lines in 1988	SCWL X commercial meat stocks		*B13*	Good	840	No	With collaboration	**Ewald**
Cornell N2a MHC: *B21*; erythrocyte alloantigen *C2*; highly resistant to Marek's disease virus.	Specific pathogen-free	SCWL		*B21*, *C2*	Good	23M/100F	No	Yes, fee	**Schat**
Cornell P2a MHC: *B19*, erythrocyte alloantigen *C2*; highly susceptible to Marek's disease virus.	Specific pathogen-free	SCWL		*B19*, *C2*	Good	30M/110F	No	Yes, fee	**Schat**
NIU Female Breeder Parent Stock B19 MHC: *B19*; used as female parent in immunological challenges.	Derived from Ancona synthetic stocks homozygous for non-MHC system genes	Mixed Ancona		*B19*	Fair	N/A	No	With collaboration	**Briles**

Table 2.1 Stock information

Category Stock name and description	Origin and history	Breed	Genetic characteristics	Allele symbol	Status	Number of birds	Cryo-preserv.	Available	Curator
Chicken (cont.)									
Bloodtype-MHC (cont.)									
NIU Female Breeder Parent Stock B2 MHC: *B2*; used as female parent in immunological challenges.	Derived from Ancona synthetic stocks homozygous for non-MHC system genes	Mixed Ancona		*B2*	Fair	N/A	No	With collaboration	**Briles**
NIU Female Breeder Parent Stock B5 MHC: *B5*; used as female parent in immunological challenges.	Derived from Ancona synthetic stocks homozygous for non-MHC system genes	Mixed Ancona		*B5*	Fair	N/A	No	With collaboration	**Briles**
RPRL-Cornell JM-N MHC: *B21*; resistant to Marek's disease virus strain JM.	Derived from Cornell JM randombred stock; specific pathogen-free	SCWL		*B21*	Good: USDA	6M/42F	Semen	Yes	**Bacon**
RPRL-Cornell JM-P MHC: *B19*; susceptible to Marek's disease virus strain JM.	Derived from Cornell JM randombred stock; specific pathogen-free	SCWL		*B19*	Good: USDA	6M/42F	Semen	Yes	**Bacon**
UNH 192 MHC: *B19*.	Derived from cross of SCWL and Ancona; kept as closed flock since 1988	SCWL X Ancona		*B19*	Good	10M/150F	No	Yes	**Taylor**
Bloodtype-MHC-Inbred									
ISU 19-13 Inbreeding coefficient (F)>0.98; MHC: *B13*.	Derived from crosses of 1920s ISU inbred stocks before 1935	SCWL		*B13*	Good	2M/16F	No	With collaboration	**Lamont**
ISU 19-15.1 Inbreeding coefficient (F)>0.98; MHC: *B15.1*.	Derived from crosses of 1920s ISU inbred stocks before 1935	SCWL		*B15.1*	Good	2M/16F	No	With collaboration	**Lamont**
ISU 8-15.1 Inbreeding coefficient (F)>0.98; MHC: *B15.1*.	Derived from crosses of 1920s ISU inbred stocks before 1935	Barred Leghorn		*B15.1*	Good	2M/16F	No	With collaboration	**Lamont**
ISU G-B1 Inbreeding coefficient (F)>0.99; MHC: *B13*.	Congenic with ISU GH	SCWL		*B13*	Good	3M/30F	No	With collaboration	**Lamont**
ISU G-B2 Inbreeding coefficient (F)>0.99; MHC: *B6*.	Congenic with ISU GH	SCWL		*B6*	Good	3M/30F	No	With collaboration	**Lamont**
ISU GH-1 Inbreeding coefficient (F)>0.99; MHC: *B1*.	Derived from a cross of Ghostley Hatchery (MN) females and HN males in 1954	SCWL		*B1*	Good	2M/16F	No	With collaboration	**Lamont**
ISU GH-13 Inbreeding coefficient (F)>0.99; MHC: *B13*.	Derived from a cross of Ghostley Hatchery (MN) females and HN males in 1954	SCWL		*B13*	Good	2M/16F	No	With collaboration	**Lamont**
ISU GH-15.1 Inbreeding coefficient (F)>0.99; MHC: *B15.1*.	Derived from a cross of Ghostley Hatchery (MN) females and HN males in 1954	SCWL		*B15.1*	Good	2M/16F	No	With collaboration	**Lamont**
ISU HN-12 Inbreeding coefficient (F)>0.99; MHC: *B12*.	Derived from a pure Kimber line from H&N in 1954	SCWL		*B12*	Good	2M/16F	No	With collaboration	**Lamont**
ISU HN-15 Inbreeding coefficient (F)>0.99; MHC: *B15*.	Derived from a pure Kimber line from H&N in 1954	SCWL		*B15*	Good	2M/16F	No	With collaboration	**Lamont**
ISU M15.2 Inbreeding coefficient (F)>0.98; MHC: *B15.2*; original stock thought to be resistant to lymphoid leukosis.	Imported from Egypt in 1954	Fayoumi		*B15.2*	Good	2M/16F	No	With collaboration	**Lamont**

Table 2.1 Stock information

Category Stock name and description	Origin and history	Breed	Genetic characteristics	Allele symbol	Status	Number of birds	Cryo-preserv.	Available	Curator
Chicken (cont.)									
Bloodtype-MHC-Inbred (cont.)									
ISU M5.1 Inbreeding coefficient (F)>0.98; MHC: *B5.1*; original stock thought to be resistant to lymphoid leukosis.	Imported from Egypt in 1954	Fayoumi		*B5.1*	Good	2M/16F	No	With collaboration	**Lamont**
ISU Sp21.2 Inbreeding coefficient (F)>0.98; MHC: *B21.2*.	Imported from Spain in 1954	Spanish		*B21.2*	Good	3M/30F	No	With collaboration	**Lamont**
NCSU GB-1 MHC: *B13*.	Acquired from Iowa State U; congenic with ISU GH	SCWL		*B13*	Good	40M/100F	No	Yes	**Qureshi**
NCSU GB-2 MHC: *B6*.	Acquired from Iowa State U; congenic with ISU GH	SCWL		*B6*	Good	40M/100F	No	Yes	**Qureshi**
RPRL 15.15-5 MHC: *B5* from RPRL 15I4.	Congenic with RPRL 15I5; specific pathogen-free	SCWL		*B5*	Good: USDA	6M/35F	Semen	Yes	**Bacon**
RPRL 15.6-2 MHC: *B2* from RPRL 6I1.	Congenic with RPRL 15I5; specific pathogen-free	SCWL		*B2*	Good: USDA	6M/35F	Semen	Yes	**Bacon**
RPRL 15.7-2 MHC: *B2* from RPRL 7I2.	Congenic with RPRL 15I5; specific pathogen-free	SCWL		*B2*	Good: USDA	6M/35F	Semen	Yes	**Bacon**
RPRL 15.C-12 MHC: *B12* from Reaseheath line C.	Congenic with RPRL 15I5; specific pathogen-free	SCWL		*B12*	Good: USDA	6M/35F	Semen	Yes	**Bacon**
RPRL 15.N-21 MHC: *B21* from Cornell JM-N.	Congenic with RPRL 15I5; specific pathogen-free	SCWL		*B21*	Good: USDA	6M/35F	Semen	Yes	**Bacon**
RPRL 15.P-13 MHC: *B13* from Cornell JM-P.	Congenic with RPRL 15I5; specific pathogen-free	SCWL		*B13*	Good: USDA	6M/35F	Semen	Yes	**Bacon**
RPRL 15.P-19 MHC: *B19* from Cornell JM-P.	Congenic with RPRL 15I5; specific pathogen-free	SCWL		*B19*	Good: USDA	6M/35F	Semen	Yes	**Bacon**
RPRL 15I5 Inbreeding coefficient (F)>0.999; MHC: *B15*; endogenous viruses ev1, ev6, and ev10 or ev11; susceptible to avian leukosis viruse A and B and Marek's disease virus.	Specific pathogen-free	SCWL		*B15*, *ALVE1*, *ALVE6*, *ALVE10*, *ALVE11*	Good: USDA	9M/63F	Semen	Yes	**Bacon**
RPRL 7I1 Inbreeding coefficient (F)>0.999; MHC: *B2*; endogenous viruses ev1 and ev3; susceptible to avian leukosis viruse C and Marek's disease virus.	Specific pathogen-free	SCWL		*B2*, *ALVE1*, *ALVE3*	Good: USDA	12M/84F	Semen	Yes	**Bacon**
RPRL Line 0 MHC: *B21*; free of all known endogenous viruses; susceptible to avian leukosis viruses A, B & C.	Specific pathogen-free	SCWL		*B21*	Good: USDA	12M/84F	Semen	Yes	**Bacon**
UCD 003 Inbreeding coefficient (F)>0.99; A/E blood types *4/7*; MHC: *B17*; shown to be resistant to Rous sarcoma and susceptible to Marek's disease virus .	Full-sib crosses since 1956; one of the reference lines in the East Lansing Chicken Genome Mapping Project, and forms the genetic background for a number of congenic strains that carry various MHC haplotypes or developmental mutations (see UCD stock list)	SCWL		*B17*, *A4/E7*	Poor	10M/12F	Semen	Yes	**Abplanalp**

Table 2.1 Stock information

Category Stock name and description	Origin and history	Breed	Genetic characteristics	Allele symbol	Status	Number of birds	Cryo-preserv.	Available	Curator
Chicken (cont.)									
Bloodtype-MHC-Inbred (cont.)									
UCD 253 MHC: *B18*; shown to be resistant to Rous sarcoma and Marek's disease viruses.	Congenic with UCD 003	SCWL		*B18*	Poor	5M/6F	Semen	Yes	**Abplanalp**
UCD 254 MHC: *B15*; shown to be susceptible to Rous sarcoma and Marek's disease viruses.	Congenic with UCD 003	SCWL		*B15*	Poor	5M/6F	Semen	Yes	**Abplanalp**
UCD 312 MHC: *B24*; shown to be susceptible to Rous sarcoma and Marek's disease viruses.	Congenic with UCD 003; MHC from New Hampshire chicken strain	SCWL		*B24*	Poor	5M/6F	Semen	Yes	**Abplanalp**
UCD 313 MHC: *B3*; shown to be resistant to Rous sarcoma virus.	Congenic with UCD 003; died out as live birds in 1996	SCWL		*B3*	No live birds	0	Semen	With permission	**Abplanalp**
UCD 330 MHC: *B21*; shown to be resistant to Rous sarcoma and Marek's disease viruses.	Congenic with UCD 003; MHC from Australorp inbred line	SCWL		*B21*	Poor	5M/6F	Semen	Yes	**Abplanalp**
UCD 331 MHC: *B2*; shown to be resistant to Rous sarcoma and Marek's disease viruses.	Congenic with UCD 003; MHC from a dwarf SCWL	SCWL		*B2*	Poor	5M/6F	Semen	Yes	**Abplanalp**
UCD 335 MHC: *B19*; shown to be susceptible to Rous sarcoma and Marek's disease viruses.	Congenic with UCD 003; MHC from a commercial Richardson Mt. Hope SCWL	SCWL		*B19*	Poor	5M/6F	Semen	Yes	**Abplanalp**
UCD 336 MHC: *BQ* (similar to *B21*); shown to be resistant to Rous sarcoma and Marek's disease viruses.	Congenic with UCD 003; MHC from Red Jungle Fowl	SCWL		*BQ*	Poor	5M/6F	Semen	Yes	**Abplanalp**
UCD 342 MHC: *BO*; shown to be susceptible to Rous sarcoma virus.	Congenic with UCD 003; MHC from a cross of Ceylon Jungle Fowl and Red Jungle Fowl	SCWL		*BO*	Poor	5M/6F	Semen	Yes	**Abplanalp**
UCD 361 A/E blood types *2/7*.	Congenic with UCD 003	SCWL		*B17*, *A2/E7*	Poor	5M/6F	No	Yes	**Abplanalp**
UCD 380 A/E blood types *4/7*; resistant to Rous sarcoma.	Congenic with UCD 003	SCWL		*B17*, *A4/E7*	Poor	5M/6F	No	Yes	**Abplanalp**
UCD 386 MHC: *BR4/R4* (*B15/B21* recombinant); shown to be resistant to Rous sarcoma and Marek's disease viruses.	Congenic with UCD 003	SCWL		*BR4/R4*	Poor	5M/6F	No	Yes	**Abplanalp**
UCD 387 MHC: *BR5/R5* (*B21/B15* recombinant); shown to be susceptible to Rous sarcoma and Marek's disease viruses.	Congenic with UCD 003	SCWL		*BR5/R5*	Poor	5M/6F	No	Yes	**Abplanalp**
UNH 6.15-5 Inbreeding coefficient (F)>0.999; MHC: *B5*.	Congenic with UNH 6-1	SCWL		*B5*	Good	10M/40F	No	Yes	**Taylor**
UNH 6.6-2 Inbreeding coefficient (F)>0.999; MHC: *B2*.	Congenic with UNH 6-1	SCWL		*B2*	Good	10M/40F	No	Yes	**Taylor**
UNH-UCD 003 Inbreeding coefficient (F)>0.999; MHC: *B17*.	Acquired from U California-Davis in 1986	SCWL		*B17*	Good	10M/40F	No	Yes	**Taylor**

Table 2.1 Stock information

Category Stock name and description	Origin and history	Breed	Genetic characteristics	Allele symbol	Status	Number of birds	Cryo-preserv.	Available	Curator
Chicken (cont.)									
Bloodtype-MHC-Inbred (cont.)									
UNH-UCD 003.R1 MHC: *BF24-BG23* (B complex recombinant); backcrossed eight times to UCD-003.	Congenic with UCD 003	SCWL		*BF24-BG23*	Good	10M/40F	No	Yes	**Taylor**
UNH-UCD 003.R2 MHC: *BF2-BG23* (B complex recombinant); backcrossed eight times to UCD-003.	Congenic with UCD 003	SCWL		*BF2-BG23*	Good	10M/40F	No	Yes	**Taylor**
UNH-UCD 003.R3 MHC: *BF2-BG23* (B complex recombinant); backcrossed eight times to UCD-003.	Congenic with UCD 003	SCWL		*BF2-BG23*	Good	10M/40F	No	Yes	**Taylor**
UNH-UCD 003.R4 MHC: *BF2-BG23* (B complex recombinant); backcrossed eight times to UCD-003.	Congenic with UCD 003	SCWL		*BF2-BG23*	Good	10M/40F	No	Yes	**Taylor**
UNH-UCD 003.R5 MHC: *BF21-BG19* (B complex recombinant); backcrossed eight times to UCD-003.	Congenic with UCD 003	SCWL		*BF21-BG19*	Good	10M/40F	No	Yes	**Taylor**
UNH-UCD 003.R6 MHC: *BF21-BG23* (B complex recombinant); backcrossed eight times to UCD-003.	Congenic with UCD 003	SCWL		*BF21-BG23*	Good	10M/40F	No	Yes	**Taylor**
UNH-UCD 386 MHC: *BF15-BG21* (B complex recombinant).	Acquired from U California-Davis in 1995; congenic with UCD 003	SCWL		*BF15-BG21*	Good	10M/40F	No	Yes	**Taylor**
UNH-UCD 387 MHC: *BF21-BG15* (B complex recombinant).	Acquired from U California-Davis in 1995; congenic with UCD 003	SCWL		*BF21-BG15*	Good	10M/40F	No	Yes	**Taylor**
UNH-UCD 3C.1 MHC: *B17*, with recombined B complex.	Congenic with UCD 003	SCWL		*B17*	Good	10M/40F	No	Yes	**Taylor**
Chromosomal variant									
Ottawa B-19/B-19 M13 MHC: *B19*; segregating for DNA banding patterns using M13 phage.	Also referred to as Ottawa B19	SCWL		*B19*	No live birds	0	Blastodisc cells	With permission	**Etches**
Ottawa B-21/B-21 M13 MHC: *B21*; segregating for DNA banding patterns using M13 phage.	Also referred to as Ottawa B21	SCWL		*B21*	No live birds	0	Blastodisc cells	With permission	**Etches**
UCD-Cornell Mono-PNU Embryos homozygous for a large deletion on the MHC chromosome (16) lack most of the rDNA genes and die early in embryogenesis; heterozygotes develop normally and are viable.	Acquired from Cornell in 1995	SCWL			Good	120	No	With collaboration	**Delany**
UCD-Cornell Trisomic Trisomy or tetrasomy of the MHC-containing chromosome (16); such aneuploids can hatch and reach maturity, but are often small and have poor production characteristics.	Acquired from Cornell in 1995	SCWL			Good	120	No	With collaboration	**Delany**

Table 2.1 Stock information

Category Stock name and description	Origin and history	Breed	Genetic characteristics	Allele symbol	Status	Number of birds	Cryo-preserv.	Available	Curator
Chicken (cont.)									
Chromosomal variant (cont.)									
Wisconsin Chromosomal Rearrangements Six chromosomal translocations and two inversions involving chromosomes 1 through 4 and Z.	Kept in genetic background of Wisconsin New Hampshire	New Hampshire			Fair: institutional	4M/6F	No	With collaboration	**Bitgood**
Endogenous virus									
RPRL 15B1 Non-inbred; MHC: *B5* and *B15*; susceptible to avian leukosis viruses A, B & C and Marek's disease virus; contains endogenous virus ev1.	Specific pathogen-free	SCWL		*B5*, *B15*, *ALVE1*	Good: USDA	6M/42F	Semen	Yes	**Bacon**
Endogenous virus-Inbred									
RPRL 100B Inbreeding coefficient (F)>0.999; MHC: *B2*; endogenous viruses ev1 and ev3; susceptible to avian leukosis viruses B, C, and E, and Marek's disease virus.	Congenic with RPRL 7I2; specific pathogen-free	SCWL		*B2*, *ALVE1*, *ALVE3*	Good: USDA	6M/42F	Semen	Yes	**Bacon**
RPRL 6I3 Inbreeding coefficient (F)>0.999; MHC: *B2*; endogenous viruses ev1 and ev3; susceptible to avian leukosis viruses A,B, &C, and resistant to Marek's disease virus.	Specific pathogen-free	SCWL		*B2*, *ALVE1*, *ALVE3*	Good: USDA	12M/84F	Semen	Yes	**Bacon**
RPRL 7I2 Inbreeding coefficient (F)>0.999; MHC: *B2*; endogenous viruses ev1 and ev3; susceptible to avian leukosis viruse C and Marek's disease virus.	Specific pathogen-free	SCWL		*B2*, *ALVE1*, *ALVE3*	Good: USDA	12M/84F	Semen	Yes	**Bacon**
RPRL Reaseheath Line C Inbreeding coefficient (F)>0.999; MHC: *B12*; endogenous viruses ev1, ev7, ev10; susceptible to leukosis B and C.	Specific pathogen-free	SCWL		*B12*, *ALVE1*, *ALVE7*, *ALVE10*	Good: USDA	6M/42F	Semen	Yes	**Bacon**
Inbred									
ADOL 6C.7A ReCon One of 19 different recombinant lines (primarily congenic with RPRL 6I3), each subline with 12.5% of genome from RPRL 7I2 (sublines identified by letters).	12% RPRL 7I2, 88% RPRL 6I3	SCWL		*B2*	Good: USDA	4M/10F	No	Yes	**Bacon**
ADOL 6C.7B ReCon One of 19 different recombinant lines (primarily congenic with RPRL 6I3), each subline with 12.5% of genome from RPRL 7I2 (sublines identified by letters).	12% RPRL 7I2, 88% RPRL 6I3	SCWL		*B2*	Good: USDA	4M/10F	No	Yes	**Bacon**
ADOL 6C.7C ReCon One of 19 different recombinant lines (primarily congenic with RPRL 6I3), each subline with 12.5% of genome from RPRL 7I2 (sublines identified by letters).	12% RPRL 7I2, 88% RPRL 6I3	SCWL		*B2*	Good: USDA	4M/10F	No	Yes	**Bacon**
ADOL 6C.7D ReCon One of 19 different recombinant lines (primarily congenic with RPRL 6I3), each subline with 12.5% of genome from RPRL 7I2 (sublines identified by letters).	12% RPRL 7I2, 88% RPRL 6I3	SCWL		*B2*	Good: USDA	4M/10F	No	Yes	**Bacon**

Table 2.1 Stock information

Category Stock name and description	Origin and history	Breed	Genetic characteristics	Allele symbol	Status	Number of birds	Cryo-preserv.	Available	Curator
Chicken (cont.)									
Inbred (cont.)									
ADOL 6C.7F ReCon One of 19 different recombinant lines (primarily congenic with RPRL 6I3), each subline with 12.5% of genome from RPRL 7I2 (sublines identified by letters).	12% RPRL 7I2, 88% RPRL 6I3	SCWL		*B2*	Good: USDA	4M/10F	No	Yes	**Bacon**
ADOL 6C.7G ReCon One of 19 different recombinant lines (primarily congenic with RPRL 6I3), each subline with 12.5% of genome from RPRL 7I2 (sublines identified by letters).	12% RPRL 7I2, 88% RPRL 6I3	SCWL		*B2*	Good: USDA	4M/10F	No	Yes	**Bacon**
ADOL 6C.7I ReCon One of 19 different recombinant lines (primarily congenic with RPRL 6I3), each subline with 12.5% of genome from RPRL 7I2 (sublines identified by letters).	12% RPRL 7I2, 88% RPRL 6I3	SCWL		*B2*	Good: USDA	4M/10F	No	Yes	**Bacon**
ADOL 6C.7J ReCon One of 19 different recombinant lines (primarily congenic with RPRL 6I3), each subline with 12.5% of genome from RPRL 7I2 (sublines identified by letters).	12% RPRL 7I2, 88% RPRL 6I3	SCWL		*B2*	Good: USDA	4M/10F	No	Yes	**Bacon**
ADOL 6C.7K ReCon One of 19 different recombinant lines (primarily congenic with RPRL 6I3), each subline with 12.5% of genome from RPRL 7I2 (sublines identified by letters).	12% RPRL 7I2, 88% RPRL 6I3	SCWL		*B2*	Good: USDA	4M/10F	No	Yes	**Bacon**
ADOL 6C.7L ReCon One of 19 different recombinant lines (primarily congenic with RPRL 6I3), each subline with 12.5% of genome from RPRL 7I2 (sublines identified by letters).	12% RPRL 7I2, 88% RPRL 6I3	SCWL		*B2*	Good: USDA	4M/10F	No	Yes	**Bacon**
ADOL 6C.7M ReCon One of 19 different recombinant lines (primarily congenic with RPRL 6I3), each subline with 12.5% of genome from RPRL 7I2 (sublines identified by letters).	12% RPRL 7I2, 88% RPRL 6I3	SCWL		*B2*	Good: USDA	4M/10F	No	Yes	**Bacon**
ADOL 6C.7N ReCon One of 19 different recombinant lines (primarily congenic with RPRL 6I3), each subline with 12.5% of genome from RPRL 7I2 (sublines identified by letters).	12% RPRL 7I2, 88% RPRL 6I3	SCWL		*B2*	Good: USDA	4M/10F	No	Yes	**Bacon**
ADOL 6C.7P ReCon One of 19 different recombinant lines (primarily congenic with RPRL 6I3), each subline with 12.5% of genome from RPRL 7I2 (sublines identified by letters).	12% RPRL 7I2, 88% RPRL 6I3	SCWL		*B2*	Good: USDA	4M/10F	No	Yes	**Bacon**
ADOL 6C.7R ReCon One of 19 different recombinant lines (primarily congenic with RPRL 6I3), each subline with 12.5% of genome from RPRL 7I2 (sublines identified by letters).	12% RPRL 7I2, 88% RPRL 6I3	SCWL		*B2*	Good: USDA	4M/10F	No	Yes	**Bacon**
ADOL 6C.7S ReCon One of 19 different recombinant lines (primarily congenic with RPRL 6I3), each subline with 12.5% of genome from RPRL 7I2 (sublines identified by letters).	12% RPRL 7I2, 88% RPRL 6I3	SCWL		*B2*	Good: USDA	4M/10F	No	Yes	**Bacon**

Table 2.1 Stock information

Category Stock name and description	Origin and history	Breed	Genetic characteristics	Allele symbol	Status	Number of birds	Cryo-preserv.	Available	Curator
Chicken (cont.)									
Inbred (cont.)									
ADOL 6C.7T ReCon One of 19 different recombinant lines (primarily congenic with RPRL 6I3), each subline with 12.5% of genome from RPRL 7I2 (sublines identified by letters).	12% RPRL 7I2, 88% RPRL 6I3	SCWL		*B2*	Good: USDA	4M/10F	No	Yes	**Bacon**
ADOL 6C.7V ReCon One of 19 different recombinant lines (primarily congenic with RPRL 6I3), each subline with 12.5% of genome from RPRL 7I2 (sublines identified by letters).	12% RPRL 7I2, 88% RPRL 6I3	SCWL		*B2*	Good: USDA	4M/10F	No	Yes	**Bacon**
ADOL 6C.7W ReCon One of 19 different recombinant lines (primarily congenic with RPRL 6I3), each subline with 12.5% of genome from RPRL 7I2 (sublines identified by letters).	12% RPRL 7I2, 88% RPRL 6I3	SCWL		*B2*	Good: USDA	4M/10F	No	Yes	**Bacon**
ADOL 6C.7X ReCon One of 19 different recombinant lines (primarily congenic with RPRL 6I3), each subline with 12.5% of genome from RPRL 7I2 (sublines identified by letters).	12% RPRL 7I2, 88% RPRL 6I3	SCWL		*B2*	Good: USDA	4M/10F	No	Yes	**Bacon**
Ottawa GF Inbreeding coefficient (F)>0.8.	Derived from Ottawa 3	SCWL			No live birds	0	Blastodisc cells	With permission	**Etches**
Ottawa GH Inbreeding coefficient (F)>0.8.	Derived from Ottawa 3	SCWL			No live birds	0	Blastodisc cells	With permission	**Etches**
Ottawa M2 Inbreeding coefficient (F)>0.7.	Derived from Ottawa 4	SCWL			No live birds	0	Blastodisc cells	With permission	**Etches**
Ottawa WG Inbreeding coefficient (F)>0.7.	Derived from Ottawa 8	SCWL			No live birds	0	Blastodisc cells	With permission	**Etches**
Ottawa XP Inbreeding coefficient (F)>0.7.	Derived from Ottawa 9	SCWL			No live birds	0	Blastodisc cells	With permission	**Etches**
UCD 001 Inbreeding coefficient (F)>0.8; from wild-type jungle fowl.	One of the reference lines used in the East Lansing Chicken Genome Mapping Project	Red Jungle Fowl			Good	50M/50F	No	With collaboration	**Delany**
Wisconsin Ancona Inbreeding coefficient (F)>0.9; half-sibling inbreeding since the mid-1940s.	Kept as closed flock for more than 20 generations	Ancona			Fair: institutional	4M/15F	No	With collaboration	**Bitgood**
Wisconsin Leghorn line UW-Sp2 Inbreeding coefficient (F)>0.9; half-sibling inbreeding since the mid-1940s.	Derived from 1940/1950 Canadian Spruceleigh strains	SCWL			Fair: institutional	4M/15F	No	With collaboration	**Bitgood**
Mutant-Color, feather									
Wisconsin Autosomal Albino Homozygotes have white feathers and red eyes.	Acquired from U Massachusetts-Amherst in 1997 (UMass Autosomal Albino)	SCWL	Autosomal recessive.	*c*[a]	Fair: institutional	4M/12F	No	With collaboration	**Bitgood**

Table 2.1 Stock information

Category Stock name and description	Origin and history	Breed	Genetic characteristics	Allele symbol	Status	Number of birds	Cryo-preserv.	Available	Curator
Chicken (cont.)									
Mutant-Developmental defect-Eye									
UBC RC *Retinal degeneration* homozygotes do not form rods or cones in the retina, causing blindness.	Found in Minnesota Rhode Island Red in 1980; backcrossed yearly to UBC-Minnesota Rhode Island Red	Rhode Island Red	Autosomal recessive.	*rc* or *rd*	Poor	12 M/40F	No	Yes	**Cheng**
UMass Pink Eye *Pink-eye* homozygotes have pink eyes and a high incidence of cataracts; feather color is also diluted.	Also has dominant extension of melanin (*E*)	Mixed	Autosomal recessive.	*pk*	Dispersal in 1998	25	No	Yes	**Smyth**
Wisconsin Blind/Cataract Homozygous chicks are blind at hatch, with visible cataracts.	Kept in genetic background of Wisconsin SCWL	SCWL	Autosomal recessive semi-viable.	*bc*	Fair: institutional	6M/12F	No	With collaboration	**Bitgood**
Wisconsin Pink-eye Homozygotes have pink eyes and a high incidence of cataracts; feather color is diluted, even with dominant extension of melanin (E).	Acquired from U Massachusetts-Amherst in 1998	Mixed	Autosomal recessive.	*pk*	Poor	4M/12F	No	Yes	**Bitgood**
Wisconsin Pop-eye Homozygotes have a conical protrusion of the cornea (keratoconus) first seen at 5 wk posthatch.	Kept in Wisconsin New Hampshire genetic background	New Hampshire	Sex-linked recessive.	*pop*	Fair: institutional	6M/12F	No	With collaboration	**Bitgood**
Mutant-Developmental defect-Face/limb									
Storrs Chondrodystrophy Homozygotes have short upper beaks, shortened long bones, and bent tibiae.	Mutation reported in SCWL in 1942; kept at Storrs since late 1940s	SCWL	Autosomal recessive embryonic lethal.	*ch*	Poor	5M/19F	No	Yes	**Pierro**
Storrs Creeper Heterozygotes have shortened limbs, and homozygotes die before hatch; stock also carries rose comb (*R*) and ptilopody (leg feathering: *Pt*).	Held at Storrs since the 1920s; mutation present in a few exhibition breeds	Mixed Rose comb WL	R and Pt are autosomal dominants; cp is an autosomal incomplete dominant, lethal in homozygotes.	*Cp*, *R*, *Pt*	Poor	10M/39F	No	Yes	**Pierro**
Storrs Diplopodia-3 Homozygotes display moderate preaxial polydactyly, dwarfing, exposed viscera, and shortened upper beak.	Mutation reported in inbred SCWL in 1972; acquired from U Saskatchewan in the 1960s	Mixed SCWL	Autosomal recessive embryonic lethal.	*dp-3*	Poor	5M/22F	No	Yes	**Pierro**
Storrs Diplopodia-5 Homozygotes display moderate preaxial polydactyly, dwarfing, exposed viscera, and shortened upper beak.	Mutation reported in 1983; acquired from U Saskatchewan in late 1980s	Mixed SCWL	Autosomal recessive embryonic lethal.	*dp-5*	Poor	5M/21F	No	Yes	**Pierro**
Storrs Limbless Homozygotes do not form limb buds or limbs, and usually have a shortened upper beak.	Mutation reported in 1979 in a flock of Rhode Island Reds; acquired from U Wisconsin in late 1980s	Mixed SCWL	Autosomal recessive embryonic lethal.	*ll*	Poor	5M/20F	No	Yes	**Pierro**
Storrs Micromelia-Abbott Homozygotes have distinctly shortened long bones.	Mutation reported in crooked-neck dwarf stock from U California-Davis	Mixed SCWL	Autosomal recessive embryonic lethal.	*mm-A*	Poor	5M/17F	No	Yes	**Pierro**
Storrs Micromelia-Hays Homozygotes have distinctly shortened long bones.	Mutation reported in Rhode Island Red stock in 1944; held at Storrs since 1950s	SCWL	Autosomal recessive embryonic lethal.	*mm-H*	Poor	5M/20F	No	Yes	**Pierro**
Storrs Nanomelia Homozygotes have severely shortened long bones in the limbs; may also carry the mutant allele for leg-feathering (*Pt*).	Mutation reported in SCWL stock by Landauer in 1965; held at Storrs since then; also has ptilopody	Mixed SCWL	Autosomal recessive embryonic lethal.	*nm*, *Pt*	Poor	5M/20F	No	Yes	**Pierro**

Table 2.1 Stock information

Category Stock name and description	Origin and history	Breed	Genetic characteristics	Allele symbol	Status	Number of birds	Cryo-preserv.	Available	Curator
Chicken (cont.)									
Mutant-Developmental defect-Face/limb (cont.)									
Storrs Perocephaly Homozygotes show variable effects, from abnormal upper beaks to microcephaly, synophthalmia, and cyclopia.	Mutation reported in flock of SCWL by Landauer in 1956; held at Storrs since then	Mixed SCWL	Autosomal recessive embryonic lethal with low penetrance.	*per*	Poor	5M/22F	No	Yes	**Pierro**
Storrs Polydactyly Homozygotes and heterozygotes may have one or two extra preaxial toes, or a longer-than-normal first digit.	Mutation long known in exhibition stocks and reported in several ancient breeds	Mixed SCWL	Autosomal incomplete dominant.	*Po*	Poor	5M/22F	No	Yes	**Pierro**
Storrs Talpid-2 Homozygotes display extreme preaxial polydactyly (up to 10 digits per limb), overall dwarfing, exposed viscera, and cleft palate with a parrot-like upper beak.	Mutation reported in SCWL stock in 1959; acquired from U California Davis in 1996	SCWL	Autosomal recessive embryonic lethal.	*ta-2*	Poor	2M/10F	No	Yes	**Pierro**
Storrs Wingless-2 Homozygotes lack wings, have reduced legs, balloon-like feathers, short upper beak, cleft palate and small kidneys.	Mutation reported in flock of SCWL by Landauer in 1956; held at Storrs since then	SCWL	Autosomal recessive embryonic lethal.	*wg-2*	Poor	5M/22F	No	Yes	**Pierro**
UCD Cleft Primary Palate/Scaleless *Cleft primary palate* (*cpp*) homozygotes lack most of the upper beak, may also have limb reductions if homozygous for *scaleless*; for *scaleless* (*sc*): *scaleless* homozygotes do not form spurs, scales or most feathers.	Derived from crosses of: SCWL, UCD Scaleless-High and UCD Scaleless-Low; *cpp* was originally called *ectrodactyly* when found in UCD Scaleless stocks in 1966	Mixed	Autosomal recessive embryonic lethal (cpp); autosomal recessive semi-viable (sc).	*cpp*, *sc*	Poor	5M/5F	Semen	Yes	**Abbott**
UCD Coloboma X 003 Hemizygous females are moderately to severely dwarfed with mildly to severely cleft palates; some are lacking preaxial digits or have trucated wings and legs; some are edemic; the expression may be highly variable, even with the same parents.	Congenic with UCD 003; mutation first reported in 1970 at U California-Davis	SCWL	Autosomal recessive embryonic lethal.	*cm*	Poor	5M	Semen	Yes	**Abbott**
UCD Diplopodia-1 X 003 Homozygotes display moderate preaxial polydactyly, dwarfing, exposed viscera, and shortened upper beak.	Near-congenic with UCD 003; mutation first reported in 1947 at U California-Berkeley	SCWL	Autosomal recessive embryonic lethal.	*dp-1*	Poor	5M/5F	Semen	Yes	**Abbott**
UCD Diplopodia-3 X 003 Homozygotes display moderate preaxial polydactyly, dwarfing, some with exposed viscera, occasional cleft palate, and shortened upper beak.	Near-congenic with UCD 003; mutation first reported in 1972 at U California-Berkeley	SCWL	Autosomal recessive embryonic lethal.	*dp-3*	Poor	5M/5F	No	Yes	**Abbott**
UCD Donald-duck Beak/Scaleless *Donald duck beak* homozygotes have upward curled upper beaks, may have downward curled lower beaks; some hatch, but do not survive long; no known interaction with *scaleless*; for *sc*, see: UCD Scaleless-Low; may also carry *cleft primary palate* (*cpp*), see: UCD Cleft Primary Palate/Scaleless.	Reported in 1967 in New Hampshire-type chickens at U California-Davis	Mixed	Autosomal recessive embryonic lethals (*cpp* and *dd-2*); autosomal recessive semi-viable (*sc*).	*dd-2*, *sc*, may also include *cpp*	Poor	4M/3F	Semen	Yes	**Abbott**

Table 2.1 Stock information

Category Stock name and description	Origin and history	Breed	Genetic characteristics	Allele symbol	Status	Number of birds	Cryo-preserv.	Available	Curator
Chicken (cont.)									
Mutant-Developmental defect-Face/limb (cont.)									
UCD Eudiplopodia X 003 Homozygotes have extra digits on the dorsal surfaces of the limb buds, which develop into extra, bidorsal toes on the feet and occasional dorsal knobs or digits on the wings.	Congenic with UCD 003; mutation first reported 1959 in SCWL flock at U California-Berkeley	SCWL	Autosomal recessive embryonic lethal.	*eu*	Poor	5M/5F	Semen	Yes	**Abbott**
UCD Limbless X 003 Homozygotes do not form limb buds or limbs, and usually have a shortened upper beak.	Near-congenic with UCD 003; mutation first reported in 1979 at U Wisconsin	SCWL	Autosomal recessive embryonic lethal.	*ll*	Poor	5M/5F	No	Yes	**Abbott**
UCD Polydactyly X 003 Homozygous and heterozygous mutants may have one or two extra preaxial toes, or a longer-than-normal first digit.	Near-congenic with UCD 003; mutant allele common in exhibition chickens	SCWL	Autosomal dominant with incomplete penetrance.	*Po*	Poor	3M/3F	Semen	Yes	**Abbott**
UCD Stumpy X 003 Homozygotes have conical leg buds and a poorly to non-vascularized allantois that never gets larger than the head; embryo death, typically between the fifth and seventh day, is associated with massive multiple hemorrhages.	Congenic with UCD 003; mutation reported at U California-Davis in 1966 in New Hampshire X Cornish	SCWL	Autosomal recessive embryonic lethal.	*stu*	Poor	5M/5F	Semen	Yes	**Abbott**
UCD Talpid-2 X 003 Homozygotes display extreme preaxial polydactyly, dwarfing, exposed viscera, and cleft, parrot-like upper beak.	Congenic with UCD 003; mutation first reported in 1959 at U California-Davis in a SCWL flock	SCWL	Autosomal recessive embryonic lethal.	*ta-2*	Poor	5M/5F	Semen	Yes	**Abbott**
UCD Wing-reduced X 003 A complex syndrome; affected birds lack toenails and some phlanges (usually on digit 3, sometimes digit 4) and may have truncated wings.	Syndrome found in UCD 413 (muscular dystrophy) in 1990; crossed several times to UCD 003	SCWL	Multifactorial, not yet fully defined.		Poor	3M/3F	No	Yes	**Abbott**
UCD Wingless-2 X 331 Homozygotes lack wings, have reduced legs, balloon-like feathers, short upper beak, cleft palate and small metanephric kidneys.	Congenic with UCD 331; mutation first reported in 1956 at U Connecticut-Storrs	SCWL	Autosomal recessive embryonic lethal.	*wg-2*	Poor	5M/5F	Semen	Yes	**Abbott**
Wisconsin Ametapodia Heterozygotes lack metatarsals in the legs and metacarpels in the wings; homozygotes usually die early in development.	Acquired from U Massachusetts-Amherst in 1997 (UMass Ametapodia)	Mixed	Autosomal dominant, lethal in homozygotes.	*Mp*	Fair: institutional	4M/12F	No	With collaboration	**Bitgood**
Wisconsin Limbless Homozygotes do not form limb buds or limbs, and sometimes have a short upper beak.	Kept in Wisconsin Leghorn genetic background	SCWL	Autosomal recessive embryonic lethal.	*ll*	Fair: institutional	6M/20F	No	With collaboration	**Bitgood**
Wisconsin Talpid-2 Homozygotes display extreme preaxial polydactyly, dwarfing, exposed viscera, and cleft, parrot-like upper beak.	Mutation first reported in 1959 at U California-Davis; acquired in 1990s; kept in Wisconsin Leghorn genetic background	SCWL	Autosomal recessive embryonic lethal.	*ta-2*	Fair: institutional	6M/12F	No	With collaboration	**Bitgood**
Wisconsin Wingless-2 Homozygotes lack wings, have reduced legs, balloon-like feathers, short upper beak, cleft palate and small kidneys.	Mutation first reported in 1956 at U Connecticut-Storrs; now kept in Wisconsin Leghorn genetic background	SCWL	Autosomal recessive embryonic lethal.	*wg-2*	Fair: institutional	6M/12F	No	With collaboration	**Bitgood**

Table 2.1 Stock information

Category Stock name and description	Origin and history	Breed	Genetic characteristics	Allele symbol	Status	Number of birds	Cryo-preserv.	Available	Curator
Chicken (cont.)									
Mutant-Developmental defect-Skin/feather									
Storrs Ottawa Naked Homozygotes are naked at hatch with occasional syndactyly of toes 2 and 3; some feathers may form on adults.	Mutation first reported by R. Crawford in 1982; acquired from U Saskatchewan in late 1980s	New Hampshire	Autosomal recessive.	*nk*	Poor	3M/17F	No	Yes	**Pierro**
Storrs Ptilopody Homozygotes and heterozyotes have feathers replacing some of the scales on lower leg, foot, and toes.	Mutation common in exhibition breeds; introduced into Storrs Nanomelia with Buff Cochin cross; also in Storrs Creeper;	Mixed SCWL	Autosomal dominant with multifactorial modifiers.	*Pt*	Combined with Storrs Nanomelia and Creeper	see: Storrs Nanomelia	No	Yes	**Pierro**
Storrs Scaleless Homozygotes do not form spurs, scales or most feathers.	Mutation reported in New Hampshire-type stock in 1957; acquired from U California-Davis in 1965	Mixed New Hampshire	Autosomal recessive semi-viable.	*sc*	Poor	10M/30F	No	Yes	**Pierro**
UCD Ichthyosis X 003 *Ichthyosis* (*dehy*) homozygotes develop lamellar ichthyosis: chicks dehydrate rapidly after hatch, and have characteristic stringy/greasy down feathers; adults do not slough leg scales, and develop chronic skin lesions.	Near-congenic with UCD 003; mutation first reported in 1957 at U California-Berkeley	SCWL	Autosomal recessive semi-viable.	*dehy*	Poor	5M/5F	Semen	Yes	**Abbott**
UCD Naked-neck Causes a reduction in size of feather tracts on the head, neck and ventral trunk, usually giving the bird a bare or nearly bare neck.	Mutation common in exhibition breeds and in some commercial strains	Mixed SCWL	Autosomal dominant.	*Na*	No live birds	0	Semen	With permission	**Abbott**
UCD Scaleless-High Scaleless-high homozygotes do not develop scales or spurs, but selection for increased feather development has resulted in abundant down-like feathers forming on the body and sparse feathers forming on the legs.	Mutation first reported at U California-Davis in 1957; originally non-viable, but crossbreeding and selection dramatically increased viability; background breeds include Cornish, SCWL, Barred Rock, New Hampshire, Red Jungle Fowl	Mixed	Autosomal recessive semi-viable, with multifactorial modifiers.	*sc*	Poor	15M/15F	Semen	Yes	**Abbott**
UCD Scaleless-Low Scaleless-low homozygotes do not develop spurs, scales or most feathers, a condition that was enhanced by selection for low feather number.	Mutation first reported at U California-Davis in 1957; originally non-viable, but crossbreeding and selection dramatically increased viability; background breeds include Cornish, SCWL, Barred Rock, New Hampshire, Red Jungle Fowl	Mixed	Autosomal recessive semi-viable, with multifactorial modifiers.	*sc*	Poor	15M/15F	Semen	Yes	**Abbott**
Wisconsin Tardy Feathering Homozygotes have very slow growing flight feathers after hatch, but this is only detectable if chicks are also expressing sex-linked rapid feather growth (k+).	Kept in genetic background of Wisconsin Leghorn crossed with Wisconsin New Hampshire	SCWL	Autosomal recessive.	*t*	Fair: institutional	6M/12F	No	With collaboration	**Bitgood**

Table 2.1 Stock information

Category Stock name and description	Origin and history	Breed	Genetic characteristics	Allele symbol	Status	Number of birds	Cryo-preserv.	Available	Curator
Chicken (cont.)									
Mutant-Developmental defect-Spine/tail									
Storrs Dominant Rumplessness Homozygotes lack pygostyle, caudal vertebrae, uropygial gland and tail feathers; fertility is usually low if naturally mated.	Mutation reported in 1925; held at Storrs since then	SCWL	Autosomal dominant.	*Rp*	Poor	6M/21F	No	Yes	**Pierro**
Storrs Recessive Rumpless Homozygotes have fused or absent pygostyle and caudal vertebrae, and some kyphoscoliosis with extra ribs.	Mutation reported in SCWL stock in 1945; held at Storrs since then; also has *perocephaly* (*per*); kept homozygous for *rp-2*	Mixed SCWL	Autosomal recessive with incomplete penetrance.	*rp-2*	Poor	10M/67F	No	Yes	**Pierro**
UCD Scoliosis Affected birds show moderate to severe kyphoscoliosis starting at 5 weeks, and clearly visible in x-rays at 12 weeks; males are more severely affected than females.	Multifactorial syndrome uncovered in the 1950s during inbreeding of stocks at U California-Berkeley	Mixed Rose comb WL	At least two (maybe three) autosomal recessive genes.		No live birds	0	Semen	With permission	**Abbott**
Mutant-Gene pool									
OSU Dwarf Leghorn Includes seven mutations: *sex-linked dwarf*; four autosomal mutations that cause: *blastoderm degeneration* (*bld*), *blood ring and early embryo death* (*blr*), and semi-lethal *chick edema* (when hom. for *ed-a* and *ed-b*); and two new mutations that have not yet been reported: *transient congenital tremor* and *ectopia*.	Mutation kept in commercial SCWL background, but as closed flock for seven generations; developed by P. Bernier	SCWL	All recessive; one sex-linked viable (*dw*), four autosomal lethal or semi-lethal (*blr*,*bld*,*ed-a*,*ed-b*).	*dw*, *blr*, *bld*, *ed-a*, *ed-b*	Fair	20M/50F	No	Yes	**Savage**
UBC-Minnesota Marker Gene pool with 13 dominant mutations: *polydactyly*, *ptilopody, pea* and *rose* comb, *uropygial bifurcation*, *multiple spurs*, *naked neck*, *crest*, *silver*, *sex-linked barring*, *dominant white*, *muffs and beard*, and *blue egg* shell; may also contain recessive mutations *creeper* (*Cp*) and *protoporphyrin inhibitor* (*pr*).	Acquired from U Minnesota-St. Paul	Mixed	Gene pool of various dominant and recessive mutations; see description.	*Po*, *Pt*, *P*, *R*, *U*, *M*, *Na*, *Cr*, *S*, *B*, *I*, *Mb*, *O*, *Cp*, *pr*	Poor	8M/40F	No	Yes	**Cheng**
UCD Diplopodia-3/Scaleless High *Diplopodia-3* (*dp-3*) mutants display moderate preaxial polydactyly, dwarfing, exposed viscera, occasional cleft palate, and shortened upper beak; homozygous *scaleless* mutants lack spurs, scales and most feathers.	A recent cross (1997) of UCD Scaleless-High with UCD Diplopodia-3 X 003	Mixed	Two autosomal recessives: one embryonic lethal (*dp3*), one semi-viable (*sc*).	*dp-3*, *sc*	Poor	3M/5F	Semen	Yes	**Abbott**
UCD Eudiplopodia/Limbless See UCD Eudiplopodia and UCD Limbless descriptions.	Mildly inbred, including some UCD 003; crossed with UCD Scaleless-High and -Low in 1996	SCWL	Two autosomal recessive embryonic lethals.	*eu*, *ll*	Poor	10M/10F	Semen	Yes	**Abbott**
UCD Limbless/Stumpy See UCD Limbless and UCD Stumpy descriptions.	Ancestral background includes leukosis-free stocks kept at U California-Davis in the 1980s	SCWL	Two autosomal recessive embryonic lethals.	*ll*, *stu*	Poor	4M/4F	Semen	Yes	**Abbott**
UCD Silkie cross UCD Silkie crossed to UCD-003 or UCD Scaleless-low to decrease inbreeding and enhance egg production, then repeatedly back-crossed to UCD Silkie (see UCD-Silkie for desciption of mutations).	Derived from UCD Silkie; in 1995 crossed with both UCD 003 and UCD Scaleless-Low to increase vigor; backcrossed repeatedly to UCD Silkie	Mixed Silkie	Five autosomal dom. (*Cr*,*Po*,*Pt*,*Fm*,*Mb*), one sex-linked rec. (*id*), two autosomal rec. (*h*,*sc*).	*Cr*, *Fm*, *h*, *id*, *Mb*, *Po*, *Pt*, *sc*	Poor	4M/7F	No	Yes	**Abbott**

Table 2.1 Stock information

Category Stock name and description	Origin and history	Breed	Genetic characteristics	Allele symbol	Status	Number of birds	Cryo-preserv.	Available	Curator
Chicken (cont.)									
Mutant-Gene pool (cont.)									
UCD Talpid-2/Wingless-2 See UCD Talpid-2 and UCD Wingless-2 descriptions.	Mildly inbred, including some UCD 003; crossed with UCD Scaleless-High and -Low in 1996	SCWL	Two autosomal recessive embryonic lethals.	*ta-2*, *wg-2*	Poor	10M/10F	Semen	Yes	**Abbott**
Mutant-Immunological defect									
Arkansas Smyth Line B101 Selected for high expression of delayed amelanogenesis (autoimmune vitiligo: increasing amount of white feathers with each molt) also: blindness and thyroiditis; amelanosis now seen >85% of offspring.	Acquired from J. Smyth at U Massachusetts-Amherst in 1996; also known as DAM line (delayed amelanogenesis)	Brown Leghorn, synthetic	Multifactorial with variable expressivity.		Good	10M/20F	No	With collaboration	**Erf**
Arkansas Smyth Line B102 Selected for high expression of delayed amelanogenesis (autoimmune vitiligo: increasing amount of white feathers with each molt) also: blindness and thyroiditis; amelanosis now seen >85% of offspring.	Acquired from J. Smyth at U Massachusetts-Amherst in 1998; also known as DAM line (delayed amelanogenesis)	Brown Leghorn, synthetic	Multifactorial with variable expressivity.		Good	10M/20F	No	With collaboration	**Erf**
Cornell Obese (B-13) MHC *B13*; affected birds develop spontaneous autoimmune thyroiditis and, in females, a persistant right Mullerian duct.	Derived from Cornell C Strain, selected for MHC haplotype B13; closed flock for over 30 years; pedigreed annual reproduction	SCWL	Multifactorial, with as many as five major genes.	*B13*	Poor	40M/120F	No	Yes	**Marsh**
UCD 200 Inbreeding coefficient (F)>0.80; develops autoimmune scleroderma (progressive systemic sclerosis), with necrosis and sloughing of the combs and wattles (self-dubbing), polyarthritis, and some visceral lesions.	Mutation first reported at Oregon State U in 1961	SCWL	At least two recessive genes and multifactorial modifiers.	*sd*	Poor	10M/12F	No	Yes	**Abplanalp**
UMass Smyth Line Delayed amelanosis (DAM) homozygotes display a gradual loss of feather pigment with successive molts (an autoimmune condition mimicking human vitiligo), with some retinal dystrophy and autoimmune thyroiditis.	Also know as the DAM line (for delayed amelanogenesis); mutation originally found in the UMass Brown Line	Brown Leghorn, synthetic	Multifactorial with variable expressivity.		Dispersal in 1998	200	No	Yes	**Smyth**
Mutant-Neurological defect									
Saskatchewan Epileptiform seizures Homozygotes afflicted with seizures of varying severity thoughout life of bird, but good viability with extra care; used as disease model in pharmacological and physiological research.	Synthetic strain, mostly Fayoumi, derived from Agriculture Canada (CFAR) stocks in 1963	Mixed Fayoumi	Autosomal recessive semi-viable mutation with incomplete penetrance.	*epi*	Good	100M/170F	No	With collaboration	**Classen**
UNL Paroxysm Post-hatch lethal mutation, causing seizures, slow growth and eventual death of hemizygous females.	Acquired from R. Cole at Cornell U in the 1960s	SCWL	Sex-linked recessive.	*px*	Fair: Hatch, regional, misc.	5M	No	With collaboration	**Beck**
Wisconsin Pirouette Homozgyous chicks expressing this neurological mutation will spin in circles for short periods.	Kept in Wisconsin Leghorn genetic background	SCWL	Autosomal recessive semi-viable.	*pir*	Fair: institutional	6M/12F	No	With collaboration	**Bitgood**

Table 2.1 Stock information

Category Stock name and description	Origin and history	Breed	Genetic characteristics	Allele symbol	Status	Number of birds	Cryo-preserv.	Available	Curator
Chicken (cont.)									
Mutant-Physiological defect									
Athens-Canadian Dwarfs *Sex-linked dwarf* mutation in Athens-Canadian background.	Derived from Athens-Canadian Randombred	Commercial meat sire cross	Sex-linked recessive.	*dw*	Good	25M/50F	No	Yes	**Burke**
Cornell Sex-linked Dwarf Homozygous males and hemizygous females are reduced in body size; mutants are characterized by low serum T3 levels and expression of a defective form of the growth hormone receptor; MHC: *B15*.	Derived from the old Kemper SCWL strain, which is also was ancestral to Cornell K; pedigreed yearly reproduction	SCWL	Sex-linked recessive.	*Dw*, *B15*	Fair	120F	No	With collaboration	**Marsh**
Ohio Low-score Normal Affected birds show intermediate to low exhaustion scores when subjected to the "flip test" used to identify muscular dystrophy homozygotes; such expression is associated with an altered extra-cellular matrix organization.	Derived from Storrs Muscular Dystrophy after an outcross with commercial SCWL in 1970s	Mixed SCWL	Not yet defined.		Good	50M/50F	No	With collaboration	**Velleman**
Ohio Muscular Dystrophy Homozygotes develop joint stiffness and muscle weakness; breast and other muscle replaced by fat and connective tissue.	Mutation first reported in 1956 at U California-Davis; acquired from U Connecticut-Storrs in 1997; kept as homozygotes	Mixed	Autosomal recessive.	*am*	Good	50M/50F	No	With collaboration	**Velleman**
Storrs Crooked-neck Dwarf Homozygotes are edemic and dwarfed, with crooked, fragile necks, thin amuscular legs, and no voluntary muscle contractions.	Mutation discovered in New Hampshire-type chicken stock in 1945; acquired from U California-Davis in 1950s	Mixed New Hampshire	Autosomal recessive embryonic lethal.	*cn*	Poor	5M/22F	No	Yes	**Pierro**
Storrs Muscular Dystrophy Homozygotes develop joint stiffness and muscle weakness; breast and other muscle replaced by fat and connective tissue.	Mutation first reported in 1956 at U California-Davis; acquired 1958; kept as homozygotes	Mixed SCWL	Autosomal recessive.	*am*	Poor	5M/15F	No	Yes	**Pierro**
UCD 077 Inbreeding coeffiecient (F)>0.95; MHC: *B19*; high blood lipid levels.	Imported from Switzerland in 1987; full-sib inbreeding since 1968	SCWL	Multifactorial	*B19*	Poor	5M/6F	No	Yes	**Abplanalp**
UCD 413 *Muscular dystrophy* homozygotes develop joint stiffness and pectoral muscle weakness starting about 4 weeks post-hatch, a condition produced by the replacement of these muscles by fat and connective tissue; some wing reduction defects not related to MD also seen.	Derived from commercial meat stock displaying muscular dystrophy; closed flock since 1972	New Hampshire	Autosomal recessive.	*am*	Fair	15M/20F	No	Yes	**Wilson**
UCD Crooked-neck Dwarf Homozygotes are edemic and dwarfed, with crooked, fragile necks, thin amuscular legs, and no voluntary muscle contractions.	Acquired from U Connecticut-Storrs in 1991; crossed to UCD 003 several times since 1996	Mixed SCWL	Autosomal recessive embryonic lethal.	*cn*	Fair	15M/20F	No	With permission	**Abbott**
UCD Riboflavin Transfer Deficient Homozygotes can only make defective riboflavin binding protein; birds are viable, but such hens cannot put enough riboflavin into their egg albumen to support an embryo beyond 16 days of incubation; such embryos are dwarfed and hemorrhagic.	Out-crossed to UCD 003 in 1996; acquired from Pennsylvania State U in 1985	SCWL	Autosomal recessive, maternal-effect lethal.	*rd*	Poor	5M/5F	Semen	Yes	**Abbott**

Table 2.1 Stock information

Category Stock name and description	Origin and history	Breed	Genetic characteristics	Allele symbol	Status	Number of birds	Cryo-preserv.	Available	Curator
Chicken (cont.)									
Mutant-Physiological defect (cont.)									
UCD-Cornell Autosomal Dwarf Homozygotes' body size reduced by 30% , recognizable by six to eight weeks; avg weight of female is 1173 g, egg weight 57.7g, 245 eggs/cycle, generally good viability but poor hatchability.	Mutation first reported in Cornell K Strain in 1973; transferred to U California-Davis in 1998	SCWL	Autosomal recessive.	*adw*	Poor	25M/50F	No	With collaboration	**Delany**
UDel Riboflavin Transfer Deficient Homozygotes can only make defective riboflavin binding protein; birds are viable, but such hens cannot put enough riboflavin into their egg albumen to support an embryo beyond 16 days of incubation; such embryos die dwarfed and hemorrhagic.	Acquired from E. Buss at Pennsylvania State U	SCWL	Autosomal recessive, maternal-effect lethal.	*rd*	Poor	10M/50F	No	Yes	**White**
Mutant-Reproductive defect									
Arkansas Sd Line Males homozygous for sperm degeneration have defective sperm due to efferent duct malfunction.	Mutation first reported in the 1960s at Ohio State in Delaware breed; out-crossed with SCWL from a single male in 1980s	Delaware X SCWL	Autosomal recessive, sex-limited.	*sdg* or *sd*	Good	25M/150F	No	No	**Kirby**
Wisconsin Double Oviduct Line Both right and left oviduct form in most females of this line.		Rhode Island Red	Incompletely penetrant with multifactorial modifiers.	*Rov*	Fair: institutional	4M/15F	No	With collaboration	**Bitgood**
Wisconsin Restricted Ovulator Hemizygous females lay few if any eggs, have high blood lipids, and produce no offspring; males do not appear to be affected.	Kept in Wisconsin Leghorn genetic background	SCWL	Sex-linked recessive.	*ro*	Fair: institutional	6M	No	With collaboration	**Bitgood**
Mutant-Uncategorized									
ISU S1-19H Inbreeding coefficient (F)>0.5; MHC: *B19*; *IrGAT^{high}* allele linked to MHC.	Derived from two inbred Hy-Line strains in 1964	SCWL		*B19, IrGAT^{high}*	Good	4M/24F	No	With collaboration	**Lamont**
ISU S1-19L Inbreeding coefficient (F)>0.5; MHC: *B19*; *IrGAT^{low}* allele linked to MHC.	Derived from two inbred Hy-Line strains in 1964	SCWL		*B19, IrGAT^{low}*	Good	4M/24F	No	With collaboration	**Lamont**
ISU S1-1H Inbreeding coefficient (F)>0.5; MHC: *B1*; *IrGAT^{high}* allele linked to MHC.	Derived from two inbred Hy-Line strains in 1964	SCWL		*B1, IrGAT^{high}*	Good	3M/30F	No	With collaboration	**Lamont**
ISU S1-1L Inbreeding coefficient (F)>0.5; MHC: *B1*; *IrGAT^{low}* allele linked to MHC.	Derived from two inbred Hy-Line strains in 1964	SCWL		*B1, IrGAT^{low}*	Good	3M/30F	No	With collaboration	**Lamont**
Storrs Rose Comb Homozygotes and heterozygotes have a broad comb, covered with papillae, and a single spike at the back; has been associated with male infertility.	Mutation long known in exhibition stock; introduced into Storrs Creeper in 1960s	Mixed Rose comb WL	Autosomal dominant.	*R*	Combined with Storrs Creeper	see: Storrs Creeper	No	Yes	**Pierro**

Table 2.1 Stock information

Category Stock name and description	Origin and history	Breed	Genetic characteristics	Allele symbol	Status	Number of birds	Cryo-preserv.	Available	Curator
Chicken (cont.)									
Mutant-Uncategorized (cont.)									
UCD Crest/Hemoglobin-D Hb^D is a hemoglobin variant, found in both adult and embryonic hemoglobin, which is linked to the mutant *crest* allele; *Crest* causes a tuft of long feathers to form on the head.	Mutant form of hemoglobin reported linked to mutant *crest* allele, found at U California-Davis	SCWL	Linked autosomal dominant (*Cr*) and codominant (Hb^D).	*Cr*, Hb^D	No live birds	0	Semen	With permission	**Abbott**
UCD Multiplex Comb Modifies the single-comb shape by causing points (fleshy projections) to form along accessory comb axes (up to five); these are usually smaller than the primary points of the single comb.	Causes conformational faults in comb shape of single-comb exhibition chickens	Mixed SCWL	Multifactorial.		No live birds	0	Semen	With permission	**Abbott**
Wisconsin Sex-linked Skin Color Homozygous or hemizygous mutant birds cannot deposit yellow pigment in the skin.	Kept in Wisconsin Leghorn genetic background	SCWL	Sex-linked recessive.	*y*	Fair: institutional	6M/12F	No	With collaboration	**Bitgood**
Pure breed									
Arkansas Giant Jungle Fowl Naturally highly resistant to Rous sarcoma virus; probably moderately inbred (foundation flock of 6 birds in 1950).	Imported from Southeast Asia in 1950 (one male and five females); kept as closed flock	Giant Jungle Fowl			Good	9M/45F	No	Yes	**Anthony**
Guelph Silkie Breed with five major mutations: *Cr* (long feathers on crown of head), *Po* (one or more extra preaxial toes), *Pt* (legs and toes feathered), *Fm* (dark pigment in skin, internal organs), *Mb* (long feathers under chin), and *h* (feather defect: no hooklets).	Derived from exhibition stock; foundation was one pair; inbreeding minimized (about 35% in 1995)	Silkie	Five autosomal dominants (*Cr*,*Po*,*Pt*,*Fm*,*Mb*), one sex-link recessive (*id*), one autosomal recessive (*h*).	*Cr*, *Fm*, *h*, *id*, *Mb*, *Po*, *Pt*	Poor	20M/20F	No	With permission	**Etches**
NCSU Barred Plymouth Rock	Kept as closed flock used in research and teaching	Barred Plymouth Rock			Fair	4M/40F	No	Yes	**Christensen**
NCSU Rhode Island Red	Kept as closed flock used in research and teaching	Rhode Island Red			Fair	4M/40F	No	Yes	**Christensen**
Ottawa New Hampshire		New Hampshire			No live birds	0	Blastodisc cells	With permission	**Etches**
Saskatchewan Barred Plymouth Rock Used as a slow-growing chicken model in cardiac and digestive physiology research, and as source of eggs with many blood and meat spots.	Acquried in 1920s	Barred Plymouth Rock			Good	20M/50F	No	With collaboration	**Classen**
Saskatchewan Brown Leghorn Used as a slow-growing chicken model in cardiac and digestive physiology research, and as source of fertile eggs for use in research.	A strain of Danish Brown Leghorn acquired from Scattered Acres Hatchery in Hanover, Ontario in 1965	Brown Leghorn			Good	20M/50F	No	With collaboration	**Classen**
UBC-Minnesota Rhode Island Red From a moderately inbred (F approx. 0.6) flock of Rhode Island Red. Body weight 4.5 lb.	Acquired from U Minnesota-St. Paul; kept as closed flock for over 20 generations; back-cross parent population for UBC RC	Rhode Island Red			Poor	8M/40F	No	Yes	**Cheng**

Table 2.1 Stock information

Category Stock name and description	Origin and history	Breed	Genetic characteristics	Allele symbol	Status	Number of birds	Cryo-preserv.	Available	Curator
Chicken (cont.)									
Pure breed (cont.)									
UCD Silkie Breed with five major mutations: *Cr* (long feathers on crown of head), *Po* (one or more extra preaxial toes), *Pt* (legs and toes feathered), *Fm* (dark pigment in skin, internal organs), *Mb* (long feathers under chin), and *h* (feather defect: no hooklets).	Descended from six exhibition birds acquired from a hobby-breeder in central California in 1994 (4M/2F)	Silkie	Five autosomal dom. (*Cr*,*Po*,*Pt*,*Fm*,*Mb*), one sex-linked rec. (*id*), one autosomal rec. (*h*).	*Cr*, *Fm*, *h*, *id*, *Mb*, *Po*, *Pt*	Fair	3M/3F	No	Yes	**Abbott**
UI-Urbana Columbian Meat type, white/black feathers, slow growth, long legs, narrow breast; very mild selection for body size.	Non-exhibition (meat) variety; kept at U Illinois-Urbana as closed flock for over 30 years	Columbian			Good	50M/600F	No	With collaboration	**Parsons**
UI-Urbana New Hampshire Meat type, moderate growth, good conformation; new bloodlines introduced approx. 1993 to increase body weight.	Non-exhibition (meat) variety; at U Illinois-Urbana for over 30 years; kept as closed flock except for outcross in 1993	New Hampshire			Good	50M/200F	No	With collaboration	**Parsons**
UMass Light Brown Leghorn Light-brown Leghorn chicken that has never shown signs of delayed amelanogenesis.	Serves as control for UMass Smyth Line (no occurance of delayed amelanogenesis)	Light Brown Leghorn			Dispersal in 1998	15M/35F	No	Yes	**Smyth**
Randombred									
Arkansas Brown Line B101 MHC-matched control/parental line for Arkansas Smyth line B101.	Acquired from J. Smyth at U Massachusetts-Amherst in 1996; subline of ancestral parent stock for Smyth Line	Brown Leghorn		e^b	Good	10M/20F	No	With collaboration	**Erf**
Arkansas Brown Line B102 MHC-matched control/parental line for Arkansas Smyth line B102.	Acquired from J. Smyth at U Massachusetts-Amherst in 1998; subline of ancestral parent stock for Smyth Line	Brown Leghorn, synthetic		e^b	Good	10M/20F	No	With collaboration	**Erf**
Arkansas Light Brown Leghorn B101 MHC-matched control for Arkansas Smyth line B101; does not develop delayed amelanogenesis (autoimmune vitiligo).	Acquired from J. Smyth at U Massachusetts-Amherst in 1996	Light Brown Leghorn			Good	10M/20F	No	With collaboration	**Erf**
Arkansas Randombred Randombred meat bird control from multiple parental strain cross.	Formed by crossing commercial meat (broiler) parent lines (seven male lines and eight female lines)	Commercial meat sire cross			Good	16M/48F	No	Yes	**Anthony**
Athens Randombred Randombred control/standard; foundation males from commercial meat-type (WPR, WCornish, NH); foundation females from egg-production selected RIR, BPR, WPR, NH, SCWL and Cornish from Southern Regional Experiment Stations.	Synthetic line integrating commercial and UGA Experiment Station meat-type stocks, started in 1956	Commercial meat sire cross			Good	30M/150F	No	Yes	**Burke**
Athens-Canadian Randombred Randombred control/standard segregating for single, *rose*, and *pea* comb, with dominant white, some red and black feather color occurring.	Acquired from the Canadian Dept of Agriculture in 1958; includes White Wyandotte and three synthetic meat strains	Commercial meat sire cross		*R*, *P*	Good	60M/180F	No	Yes	**Burke**

Table 2.1 Stock information

Category Stock name and description	Origin and history	Breed	Genetic characteristics	Allele symbol	Status	Number of birds	Cryo-preserv.	Available	Curator
Chicken (cont.)									
Randombred (cont.)									
Cornell C Specials (B13) Control line for Cornell Obese; MHC *B13*; also can produce a persistant right Mullerian duct (often leading to the formation of two oviducts) in affected females.	MHC-matched to Cornell Obese; kept as closed flock for over 30 years; derived from Cornell C Strain	SCWL		*B13*	Poor	8M/42F	No	Yes	**Marsh**
NCSU-Cornell K Strain MHC: *B15*.	Derived from Cornell K-strain	SCWL		*B15*	Good	40M/100F	No	Yes	**Qureshi**
Ottawa 10 Control/standard maintained without selection since 1973.	No selection since 1973; derived from a combination of North American commercial egg-layer stocks	SCWL			No live birds	0	Blastodisc cells	With permission	**Etches**
Ottawa 20 Pedigreed randombred meat (broiler) reference stock from commercial sire lines.	Formed by combining nine commercial broiler sire stocks in 1979	Commercial meat sire cross			No live birds	0	Blastodisc cells	With permission	**Etches**
Ottawa 30 Pedigreed randombred meat (broiler) reference stock from commercial dam lines.	Formed by crossing nine commercial broiler dam stocks in 1979	Commercial meat sire cross			No live birds	0	Blastodisc cells	With permission	**Etches**
Ottawa 5 Control/standard maintained without selection since 1950.	No selection since 1950	SCWL			No live birds	0	Blastodisc cells	With permission	**Etches**
Ottawa 7 Control/standard maintained without selection since 1958.	Derived from four commercial egg-layer stocks and kept without selection since 1958; originally known as Kentville Control Strain 7	SCWL			No live birds	0	Blastodisc cells	With permission	**Etches**
UCD 412 Control/standard for UCD-413 (muscular dystrophy).	Kept as closed flock since 1972	New Hampshire			Fair	15M/20F	No	Yes	**Wilson**
UMass Brown Line *Brown* homozygotes are solid brown as chicks; adult males are wild-type, females are stippled dark brown; serves as MHC-matched controls for UMass Smyth Line.	Source of delayed amelanogenesis mutation; serves as MHC-matched control for UMass Smyth Line	Brown Leghorn, synthetic	Autosomal recessive.	e^b	Dispersal in 1998	90	No	Yes	**Smyth**
Wisconsin Leghorn Closed population of Single-comb White Leghorns.	Kept as closed flock for over 30 generations; used as genetic background for several mutant stocks at U Wisconsin-Madison	SCWL			Fair: institutional	20M/180F	No	With collaboration	**Bitgood**
Wisconsin Leghorn line UW-6X Closed randombred/control population of 1950s origin egg-type commercial Single-comb White Leghorns.	From cross of commercial egg-layers (Spruceleigh X HN) in 1950s; kept as closed flock for over 20 years; almost extinct, only a single, low production female in 1998	SCWL			Poor	Few	No	With collaboration	**Bitgood**
Wisconsin New Hampshire Closed randombred/control population of purebred New Hampshire chickens.	Kept as closed flock for over 30 generations; used as genetic background for several mutant stocks at U Wisconsin-Madison	New Hampshire			Fair: institutional	20M/180F	No	With collaboration	**Bitgood**

Table 2.1 Stock information

Category Stock name and description	Origin and history	Breed	Genetic characteristics	Allele symbol	Status	Number of birds	Cryo-preserv.	Available	Curator
Chicken (cont.)									
Selected-Behavioral trait									
Purdue KGB Selected for non-aggressive behavior and resistance to stress ("Kinder, Gentler Bird").	Derived from a seven-way, wide commercial cross at the North Central Regional Poultry Laboratory in 1972	SCWL			Fair	100M/100F	No	With collaboration	**Muir**
Purdue MBB Selected for more aggressive behavior ("Mean, Bad Bird").	Derived from Purdue KGB	SCWL			Fair	150M/250F	No	With collaboration	**Muir**
Selected-Egg trait									
Cornell K Strain MHC: *B15*; resistant to leukosis complex (particularly Marek's disease) by selection after natural exposure to the viruses; good egg production characteristics.	Kept as closed flock since 1954; selected to optimize egg production, egg size, body weight, other economic egg traits until 1971, then randombred with minimal selection	SCWL		*B15*	Poor	165	No	Yes, fee	**Dietert**
Guelph Barred Plymouth Rock Commercial stock selected for egg production.	Derived from commercial stock acquired in 1991	Barred Plymouth Rock			Good	30M/130F	No	With permission	**Etches**
Guelph Commercial Leghorn Line Commercial stock selected for egg production.	Derived from commercial stock acquired in 1991	SCWL			Good	30M/130F	No	With permission	**Etches**
Ottawa 1 Selected for high egg production and related traits.	Derived from Ottawa 5 in 1950; divided into Ottawa 1 and 3 in 1971	SCWL			No live birds	0	Blastodisc cells	With permission	**Etches**
Ottawa 2 Selected for high egg production and related traits.	Derived from seven Canadian ROP (egg-type) stocks in 1951; divided in 1969 into Ottawa 2 and 4	SCWL			No live birds	0	Blastodisc cells	With permission	**Etches**
Ottawa 3 Selected for high egg production and related traits.	Established from Ottawa 5 in 1950; divided into Ottawa 1 and 3 in 1971	SCWL			No live birds	0	Blastodisc cells	With permission	**Etches**
Ottawa 4 Selected for high egg production and related traits.	Derived from seven Canadian ROP (egg-type) stocks in 1951; divided in 1969 into Ottawa 2 and 4	SCWL			No live birds	0	Blastodisc cells	With permission	**Etches**
Ottawa 8 Selected for high egg production and related traits.	Derived from Ottawa 7 in 1969	SCWL			No live birds	0	Blastodisc cells	With permission	**Etches**
Ottawa 9 Selected for high egg production and related traits.	Derived from Ottawa 7 in 1969	SCWL			No live birds	0	Blastodisc cells	With permission	**Etches**
UCD 058 Inbreeding coefficient (F)>=0.8; selected for increased egg production.		SCWL			Poor	5M/6F	No	Yes	**Abplanalp**
UCD 082 Inbreeding coefficient (F)>0.76; selected for egg production with relaxed selection in recent generations.		SCWL			Poor	5M/6F	No	Yes	**Abplanalp**

Table 2.1 Stock information

Category Stock name and description	Origin and history	Breed	Genetic characteristics	Allele symbol	Status	Number of birds	Cryo-preserv.	Available	Curator
Chicken (cont.)									
Selected-Growth trait									
Auburn Tibial Dyschondroplasia-High One of two strains that were developed from a commercial meat sire line by divergent selection for tibial dyschondroplasia; incidence is 95% for birds in this line after 11 generations of selection.	Derived from a commercial meat sire line acquired in 1988	Commercial meat sire line			Good	15M/70F	No	Yes	**Berry**
Auburn Tibial Dyschondroplasia-Low One of two strains that were developed from a commercial meat sire line by divergent selection for tibial dyschondroplasia; incidence is 6% for birds in this line after 11 generations of selection.	Derived from a commercial meat sire line acquired in 1988	Commercial meat sire line			Good	15M/70F	No	Yes	**Berry**
Ottawa 21 Selected for high body weight and low fat.	Derived from Ottawa 20	Commercial meat sire cross			No live birds	0	Blastodisc cells	With permission	**Etches**
Ottawa 23 Selected for high body weight and feed efficiency.	Derived from Ottawa 20	Commercial meat sire cross			No live birds	0	Blastodisc cells	With permission	**Etches**
Ottawa 25 Selected for high body weight, low fat, and feed efficiency.	Derived from Ottawa 20	Commercial meat sire cross			No live birds	0	Blastodisc cells	With permission	**Etches**
Ottawa 31 Selected for high body weight, feed efficiency, and egg production.	Derived from Ottawa 30	Commercial meat sire cross			No live birds	0	Blastodisc cells	With permission	**Etches**
PSU-Athens RB 14-42H (HiK) Selected for maximum growth between 14 and 42 days from a starting population of 350.	Derived from Athens-Canadian Randombred from U Georgia-Athens	Commercial meat stock X egg selected female lines			Good: Exp. Sta. & USDA	20M/60F	No	With collaboration	**Barbato**
PSU-Athens RB 14-42L (LoK) Selected for minimum growth between 14 and 42 days from a starting population of 350.	Derived from Athens-Canadian Randombred from U Georgia-Athens	Commercial meat stock X egg selected female lines			Good: Exp. Sta. & USDA	20M/60F	No	With collaboration	**Barbato**
PSU-Athens RB 14H Over nine generations selected for maximum growth between zero and 14 days from a starting population of 350.	Derived from Athens-Canadian Randombred from U Georgia-Athens	Commercial meat stock X egg selected female lines			Good: Exp. Sta. & USDA	20M/60F	Semen, Germ cells	With collaboration	**Barbato**
PSU-Athens RB 14L Over nine generations selected for minimum growth between zero and 14 days from a starting population of 350; very low fertility (25-30%).	Derived from Athens-Canadian Randombred from U Georgia-Athens	Commercial meat stock X egg selected female lines			Good: Exp. Sta. & USDA	20M/60F	Semen, Germ cells	With collaboration	**Barbato**
PSU-Athens RB 42H Over nine generations selected for maximum growth between zero and 42 days from a starting population of 350.	Derived from Athens-Canadian Randombred from U Georgia-Athens	Commercial meat stock X egg selected female lines			Good: Exp. Sta. & USDA	20M/60F	Semen, Germ cells	With collaboration	**Barbato**
PSU-Athens RB 42L Over nine generations selected for minimum growth between zero and 42 days from a starting population of 350.	Derived from Athens-Canadian Randombred from U Georgia-Athens	Commercial meat stock X egg selected female lines			Good	20M/60F	Semen, Germ cells	With collaboration	**Barbato**

Table 2.1 Stock information

Category Stock name and description	Origin and history	Breed	Genetic characteristics	Allele symbol	Status	Number of birds	Cryo-preserv.	Available	Curator
Chicken (cont.)									
Selected-Growth trait (cont.)									
Virginia Body Weight-High Selected 40 generations for high 8-week body weight.	Formed by crossing seven inbred lines kept at Virginia State in 1957	White Plymouth Rock			Poor	100M/100F	No	With collaboration	**Siegel**
Virginia Body Weight-Low Selected 35 generations for low 8-week body weight.	Formed by crossing seven inbred lines kept at Virginia State in 1957	White Plymouth Rock			Poor	100M/100F	No	With collaboration	**Siegel**
Selected-Immune trait									
Arkansas Progressor Selected 20 generations for tumor growth (progression) following formation with exposure to Rous sarcoma virus.	Derived from SCWL maintained at U Arkansas since approximately 1945; thought to be highly inbred; also known as Arkansas Rous Sarcoma Progression	SCWL			Good	9M/45F	No	Yes	**Erf**
Arkansas Regressor Selected 20 generations for tumor regression following formation with exposure to Rous sarcoma virus.	Derived from F-1 and F-2 progeny of crosses of SCWL and Giant Jungle Fowl; also known as Arkansas Rous Sarcoma Regression	SCWL X Giant Jungle Fowl			Good	9M/45F	No	Yes	**Erf**
Athens AR Selected for resistance to aflatoxin.	Derived from a cross of Athens AR2.5 and AR3.0 in 1997	SCWL			Good	36M/36F	No	Yes	**Burke**
Auburn R Resistant to coccidiosis; MHC: *B3*; other erythrocyte alloantigens: *A/E2*, *C2*, *D3*, *H1*, *I2*, *K2*, *P3*, *"Q"2*.	Kept as closed flock since 1948	SCWL		see description	Good	180	No	With collaboration	**Ewald**
Auburn S Susceptible to coccidiosis; MHC: *B5*; other erythrocyte alloantigens: *A/E2*, *C3*, *D2*, *H1*, *I2*, *K3*, *P2*, *"Q"1*.	Kept as closed flock since 1952	SCWL		see description	Good	200	No	With collaboration	**Ewald**
Cornell S13 MHC: *B13*; highy susceptible to Marek's disease virus; free of most avian viruses.	Derived from Cornell S Strain; specific pathogen-free	SCWL		*B13*	Good	28M/106F	No	Yes, fee	**Schat**
Ottawa 2R Selected for resistance to Marek's disease virus.	Derived from Ottawa-2 and-4; also referred to as Ottawa R2	SCWL			No live birds	0	Blastodisc cells	With permission	**Etches**
Ottawa 3R Selected for resistance to Marek's disease virus.	Derived from Ottawa-1 and-3; also referred to as Ottawa R3	SCWL			No live birds	0	Blastodisc cells	With permission	**Etches**
Ottawa 8R Selected for resistance to Marek's disease virus.	Derived from Ottawa 8 and-9; also referred to as Ottawa R8	SCWL			No live birds	0	Blastodisc cells	With permission	**Etches**
Virginia Antibody Line-High Selected over 20 generations for high antibody response to sheep red blood cells.	Derived from a Cornell randombred SCWL, starting in 1977	SCWL			Poor	100M/100F	No	With collaboration	**Siegel**
Virginia Antibody Line-Low Selected over 20 generations for low antibody response to sheep red blood cells.	Derived from a Cornell randombred SCWL, starting in 1977	SCWL			Poor	100M/100F	No	With collaboration	**Siegel**
Selected-Physiological trait									
Arkansas Ascites Resistant Selected three generations for resistance to ascites under high altitude simulation; family selection.	Pedigreed commercial synthetic stocks	Commercial meat sire cross			Good	16M/48F	No	No	**Anthony**

Table 2.1 Stock information

Category Stock name and description	Origin and history	Breed	Genetic characteristics	Allele symbol	Status	Number of birds	Cryo-preserv.	Available	Curator
Chicken (cont.)									
Selected-Physiological trait (cont.)									
Arkansas Ascites Susceptible Selected three generations for susceptibility to ascites under high altitude simulation; family selection.	Pedigreed commercial synthetic stocks	Commercial meat sire cross			Good	16M/48F	No	No	**Anthony**
Transgenic									
ADOL Trans-ALVE6 Homozygous for the *alv-6* transgene; expresses env glycoprotein of ALV subgroup A; resists infection with ALV subgroup A.		SCWL		*ALVE6*	Good: USDA	N/A	No	Yes	**Bacon**
Ottawa TR Has incorporated the *alv-6* transgene.		SCWL		*ALVE6*	No live birds	0	Blastodisc cells	With permission	**Etches**
Uncategorized									
Ottawa 6 Not reported.		Not reported			No live birds	0	Blastodisc cells	With permission	**Etches**
Ottawa 80 Not reported.		Not reported			No live birds	0	Blastodisc cells	With permission	**Etches**
Ottawa 90 Not reported.		Not reported			No live birds	0	Blastodisc cells	With permission	**Etches**
Ottawa N3 Not reported.		Not reported			No live birds	0	Blastodisc cells	With permission	**Etches**
Ottawa N4 Not reported.		Not reported			No live birds	0	Blastodisc cells	With permission	**Etches**
Ottawa N8 Not reported.		Not reported			No live birds	0	Blastodisc cells	With permission	**Etches**

Table 2.1 Stock information

Category Stock name and description	Origin and history	Breed	Genetic characteristics	Allele symbol	Status	Number of birds	Cryo-preserv.	Available	Curator
Japanese quail									
Inbred									
UBC I Full-sibling inbreeding for four generations, starting in 1992; relaxed inbreeding pressure in 1996 (crossing half sibs or less closely related birds).	Inbred starting in 1992, with relaxation of inbreeding for the last few years				Poor	8M/16F	No	Yes	**Cheng**
Mutant-Color, eggshell									
UBC CE Females homozygous for *celadon* lay blue-shelled eggs.	Acquired from U Nagoya (Japan) in 1988; combined with UBC C in 1995		Autosomal recessive.	*ce*	Combined with UBC C in 1995	see: UBC C-CE	No	Yes	**Cheng**
UBC WE Females homozygous for *white-egg* lay white-shelled eggs.	Cross of U Nagoya (Japan) WE and U Saskatchewan stock; combined with UBC W in 1995		Autosomal recessive.	*we*	Combined with UBC W in 1998	see: UBC W-WE	No	Yes	**Cheng**
Mutant-Color, feather									
Arkansas White Homozygotes have pure white feathers with dark eyes, different from English White.	Mutation reported in Arkansas randombred Japanese quail		Autosomal recessive.		Poor	36M/36F	No		**Anthony**
Arkansas English White Homozygotes have dark eyes and mostly white feathers with spashes of wild-type color.	Acquired from the Quail Resource Center		Autosomal recessive.	*wh*	Good	36M/36F	No		**Anthony**
UBC BH *Black-at-hatch* homozygotes die by the sixth day of incubation; heterozygotes are viable, but have only faint remnants of the wild-type yellow stripes at hatch.	Acquired from U Nagoya (Japan) in 1988; frequently backcrossed to UBC A		Autosomal dominant.	*Bh*	Poor	6M/12F	No	Yes	**Cheng**
UBC C-CE *Cinnamon* homozygotes have bright orange-brown feathers instead of medium brown, and eyes are red in the chick; females homozygous for *celadon* lay blue-shelled eggs.	*Cinnamon* mutation reported in UBC M in 1978; *celadon* mutation acquired from U Nagoya (Japan) in 1988; combined 1995		Autosomal recessives.	*cin*, *ce*	Poor	24M/48F	No	Yes	**Cheng**
UBC D *Dark-eyed dilute* homozygotes have dark eyes and diluted feather color; homozygotes have unpigmented retinas and nearly white feathers; *albino* hemi- and homozygotes are nearly white.	Acquired in 1979, then combined with UBC AL (from U Saskatchewan) in 1984		Two allelic sex-linked recessives.	al^D, *al*	Poor	24M/48F	No	Yes	**Cheng**
UBC F-SB *Fawn* heterozygotes have fawn-colored feathers, but Y^f is lethal in the homozygotes; *short-barb* homozygotes have feather barbs approximately 75% shorter than normal.	*Fawn* mutation from a breeder near Vancouver, BC in 1987; combined with UBC SB		Autosomal dominant Y^f is lethal in homozygotes; *sb* is an autosomal recessive.	Y^f, *sb*	Poor	24M/48F	No	Yes	**Cheng**
UBC H *Extended brown* homozygotes and, to a lesser extent, heterozygotes, have extended distribution of black and dark brown pigment in the feathers, with both sexes appearing the same.	Back-crossed to UBC A each generation		Autosomal incomplete dominant.	*E*	Poor	6M/12F	No	Yes	**Cheng**

Table 2.1 Stock information

Stock name and description	Origin and history	Breed	Genetic characteristics	Allele symbol	Status	Number of birds	Cryo-preserv.	Available	Curator
Japanese quail (cont.)									
Mutant-Color, feather (cont.)									
UBC RH *Redhead* homozygotes have distinctly red head feathers (same as pansy); *ruffled* homozygotes have curved, bent or ruffled feathers.	Acquired from Virginia Polytechnic Inst. in 1977; combined with UBC RF in 1995		Autosomal recessive.	e^{rh}	Combined with UBC RF in 1995	see: UBC RF-RH	No	Yes	**Cheng**
UBC SI *Silver* homozygotes have white feathers and a centrally depigmented retina (ring-retina); heterozygotes have greyish feathers, and may have a few white primaries.	Acquired from U Nagoya (Japan) in 1988; back-crossed to UBC A every generation		Autosomal incomplete dominant.	*B*	Poor	6M/12F	No	Yes	**Cheng**
UBC W-WE *Recessive white* homozygotes have white feathers and dark eyes; heterozygotes have white in ventral feather tracts and face, with a mixture of dark and white feathers on the back; those homozygous for *we* lay white eggs.	Mutation *wh* from flock near Vancouver, BC (1976); *we* from a cross of stocks from U Nagoya and U Saskatchewan; combined 1995		Autosomal recessives.	*wh*, *we*	Poor	24M/48F	No	Yes	**Cheng**
UBC WB *White-breasted* mutants have white feathers on face, ventral neck, breast, primaries and most secondaries.	Mutation reported in UBC A in 1975; combined with UBC PC in 1995		Autosomal recessive.	*wb*	Combined with UBC PC in 1995	see: UBC PC-WB	No	Yes	**Cheng**
UBC Y *Yellow* heterozygotes have yellow (golden) feathers with restricted black pigment distribution; the mutation is lethal in homozygous form.	Mutation reported in UBC D in 1983; back-crossed to UBC A every generation		Autosomal dominant, lethal in homozygotes.	*Y*	Poor	6M/12F	No	Yes	**Cheng**
Mutant-Developmental defect-Skin/feather									
UBC DF-MDF Two mutations acting in concert to produce defective feathers: short, sparse down at hatch, and defective barbs in later feathers; the *Df* dominant mutation is lethal in homozygotes.	Mutations reported in UBC W in 1979		Autosomal dominant (*Df*) and recessive (*mdf*) with variable expressivity.	*Df*, *mdf*	Poor	24M/48F	No	Yes	**Cheng**
UBC PC-WB *Porcupine* mutants reproduce poorly and have feathers that resemble porcupine quills (the vanes do not uncoil); *white-breasted* mutants have white feathers on face, ventral neck, and breast; wing flight feathers (primaries and most secondaries) are also white.	*Pc* mutation reported in UBC W in 1979; *wb* mutation reported in UBC A in 1975; combined 1995		Autosomal recessives.	*pc*, *wb*	Poor	24M/48F	No	Yes	**Cheng**
UBC RF-RH *Ruffled* homozygotes have curved, bent or ruffled feathers (*rf* mutation not yet reported in the literature).	*Rf* mutation reported in UBC B in 1983; *redhead* (e^{rh}) from Virginia Poly. Inst. in 1977; combined 1995		Autosomal recessives.	*rf*, e^{rh}	Poor	24M/48F	No	Yes	**Cheng**
UBC RT *Rough-textured* homozygotes have feathers that appear matted and rough, and the females produce fewer viable embryos.	Mutation reported in UBC A in 1977; combined with UBC M in 1989		Autosomal recessive.	*rt*	Combined with UBC M in 1989	see: UBC M	No	Yes	**Cheng**
UBC SB *Short distal barb* mutants show fusion in the distal barbs of contour feathers during feather growth; barbs are about 1/4 normal length, most visible in the contour feathers of the back.	Mutation reported in UBC A in 1982; pooled with UBC F		Autosomal recessive.	*sb*	Combined with UBC F	see: UBC F-SB	No	Yes	**Cheng**

Table 2.1 Stock information

Stock name and description	Origin and history	Breed	Genetic characteristics	Allele symbol	Status	Number of birds	Cryo-preserv.	Available	Curator
Japanese quail (cont.)									
Mutant-Developmental defect-Skin/feather (cont.)									
UBC SP *Spade* homozygotes have defective feathers (*sp* mutation not yet reported in the literature).	Mutation found in UBC AL in 1988; combined with UBC B in 1996		Autosomal recessive.	*sp*	Combined with UBC B in 1997	see: UBC B	No	Yes	**Cheng**
Mutant-Gene pool									
Wisconsin Japanese Quail Homozygous *wh* birds have white feathers; homozygous *we* females lay chalk-white eggs.	Acquired from U Massachusetts-Amherst in 1969		Autosomal recessive.	*wh*, *we*	Good: NASA	150M/350F	No	Yes	**Wentworth**
Mutant-Uncategorized									
UBC H5 Mutation causes H5 histones to form dimers in vitro.	Mutation reported in UBC WILD in 1992; crossed with UBC A in 1997		Incomplete dominant.		Poor	48M/96F	No	Yes	**Cheng**
Randombred									
Arkansas RBC Randombred control strain from Eastern Shore Randombred.	Acquired from Eastern Shore as a randombred control in 1990				Good	36M/36F	No		**Anthony**
Athens Control Quail Randombred control, with *white egg shell* mutation in the gene pool, propagated by random pair-matings.	Kept as closed flock since 1963				Good	120M/120F	No	Yes	**Burke**
Louisiana Randombred Quail Unselected, randombred population with some color mutations (*tuxedo*, *redhead*, *white egg*).	Kept at Louisiana State as closed flock for over 20 years				Good	60M/120F	No	Yes	**Satterlee**
Ohio R1 Propagated using 36 pairs each generation.	Derived from a cross of Athens Randombred, Athens white egg, and Wisconsin stock; kept as closed flock for 38 generations				Poor	36M/36F	No	Yes	**Nestor**
UBC A Randombred flock.	Derived from a cross of UCD Randombred quail and quail stock from Korea; kept as closed flock for over 70 generations				Poor	48M/96F	No	Yes	**Cheng**
UBC B Exceptionally nervous randombred; *spade* homozygotes have defective feathers.	Acquired from U Alberta in 1977, combined with UBC SP (*spade* mutation, affecting feathers) by 1998			*sp*	Poor	24M/48F	No	Yes	**Cheng**
UBC M *Rough-textured* homozygotes have feathers that appear matted and rough, and the females produce fewer viable embryos (*rt* mutation not yet reported in the literature); UBC M have the *extended brown* allele, and are slightly heavier than UBC A.	UBC M from a commercial (Marsh Farms) strain in 1975; combined with UBC RT in 1989		Autosomal recessive.	*rt*	Poor	24M/48F	No	Yes	**Cheng**
UBC N Very docile randombred.	Acquired from U Nagoya (Japan) in 1988				Poor	24M/48F	No	Yes	**Cheng**

Table 2.1 Stock information

Category Stock name and description	Origin and history	Breed	Genetic characteristics	Allele symbol	Status	Number of birds	Cryo-preserv.	Available	Curator
Japanese quail (cont.)									
Randombred (cont.)									
UBC NC Randombred that has proven to be very sensitive to changes in photoperiod.	Acquired from NCSU-randombred quail in 1990				Poor	24M/48F	No	Yes	**Cheng**
UBC S	Acquired from U Saskatchewan in 1983				Poor	24M/48F	No	Yes	**Cheng**
UBC WILD	Foundation stock consisted of 12 feral birds caught in Hawaii in 1985				Poor	48M/96F	No	Yes	**Cheng**
UCD Randombred Quail Wild-type feather color pattern, unselected, randomly grouped in colony cages (2M/4F); reproduced every six to eight months.	Derived from stock imported from Japan and Taiwan (1950s and 1972)				Good	200+	No	Yes	**Wilson**
UMaryland Randombred Quail	Acquired from U Wisconsin/USDA in the 1970s; kept as closed flock for approximately 20 years				Good	100	No	With collaboration	**Ottinger**
UNL Wild-type Coturnix	Acquired from U Georgia-Athens				Fair: Hatch, regional, misc.	30-60 pairs	No	With collaboration	**Beck**
Selected-Behavioral trait									
Purdue Coturnix KGB Selected for non-aggressive behavior starting in 1988.	Derived from Athens Control quail (U Georgia-Athens)				Good: Industry	10,000 birds	No	With collaboration	**Muir**
Selected-Growth trait									
Arkansas H10 Selected 18 generations for high 10-day body weight.	Derived from Arkansas RBC				Good	36M/36F	No		**Anthony**
Arkansas H17 Selected 18 generations for high 17-day body weight.	Derived from Arkansas RBC				Good	36M/36F	No		**Anthony**
Arkansas H28 Selected 18 generations for high 28-day body weight.	Derived from Arkansas RBC				Good	36M/36F	No		**Anthony**
Arkansas H40 Selected 18 generations for high 40-day body weight.	Derived from Arkansas RBC				Good	36M/36F	No		**Anthony**
Arkansas HL Selected for high early body weight gain (10-17 days), low later body weight gain (17-28 days).					Good	36M/36F	No		**Anthony**
Arkansas LH Selected for low early body weight gain (10-17 days), high later body weight gain (17-28 days).					Good	36M/36F	No		**Anthony**
Athens 52 High body weight selected.	Derived from a cross of Athens 51 and 53 (both selected 38 generations for high 4-week body weight)				Good	36M/36F	No	Yes	**Burke**
Athens 54 Low body weight selected.	Derived from a cross of two stocks, both selected 38 generations for low 4-week body weight				Good	36M/36F	No	Yes	**Burke**

Table 2.1 Stock information

Category Stock name and description	Origin and history	Breed	Genetic characteristics	Allele symbol	Status	Number of birds	Cryo-preserv.	Available	Curator
Japanese quail (cont.)									
Selected-Growth trait									
Athens 56 Intermediate body weight stock resulting from a cross of long-term selected high and low body weight stocks.	Derived from a cross of Athens P-, T-, and S-lines				Good	36M/36F	No	Yes	**Burke**
Athens P-line Selected 100 generations for high 4-week body weight on a 28% protein diet; at 70 generations, the adult size was over 150% above the control-standard population.	Derived from Athens Control quail				Good	60M/60F	No	Yes	**Burke**
Athens T-line Selected 100 generations for high 4-week body weight while under a low protein and thiouracil stress diet; resists growth depression on diets with up to 0.2% thiouracil.	Derived from Athens Control quail				Good	60M/60F	No	Yes	**Burke**
Ohio HW Inbreeding coefficient (F)=0.417; selected 30 generations for increased 4-week body weight.	Derived from Ohio R1				Poor	48M/48F	No	Yes	**Nestor**
Ohio HW-HP Inbreeding coefficient (F)=0.375; selected for male increased 4-week body weight, for female increased plasma phosphorus (indicator of yolk precursors).	Derived from Ohio HW				Poor	36M/36F	No	Yes	**Nestor**
Ohio HW-LP Inbreeding coefficient (F)=0.359; selected for male increased 4-week body weight, for female decreased plasma phosphorus two weeks after start of lay.	Derived from Ohio HW				Poor	36M/36F	No	Yes	**Nestor**
Ohio LW Inbreeding coefficient (F)=0.357; selected 30 generations for decreased 4-week body weight.	Derived from Ohio R1				Poor	48M/48F	No	Yes	**Nestor**
UBC G-QM Selected for average female body weight of 280 g at 6 weeks.	UBC G derived from a commercial strain (Marsh Farms); combined with UBC QM in 1992				Poor	24M/48F	No	Yes	**Cheng**
UBC QF Selected for average female body weight of 280 g at 6 weeks.	Acquired from Deschambault in 1990				Poor	48M/96F	No	Yes	**Cheng**
UBC QM Selected for average male body weight of 280 g at 6 weeks.	Acquired from Deschambault in 1990; combined with UBC G in 1992				Combined with UBC G in 1992	see: UBC G-QM	No	No	**Cheng**
Selected-Immune trait									
Athens AR3.0 Selected for resistance to aflatoxin.					Good	36M/36F	No	Yes	**Burke**
Selected-Physiological trait									
Athens H-PCHOL Selected for high blood plasma cholesterol for 37 generations; currently relaxed selection.	Derived from Athens Control quail				Good	30M/30F	No	Yes	**Burke**

Table 2.1 Stock information

Category Stock name and description	Origin and history	Breed	Genetic characteristics	Allele symbol	Status	Number of birds	Cryo-preserv.	Available	Curator
Japanese quail (cont.)									
Selected-Physiological trait (cont.)									
Athens L-PCHOL Selected for low blood plasma cholesterol for 37 generations; currently relaxed selection.	Derived from Athens Control quail				Good	30M/30F	No	Yes	**Burke**
Louisiana High Stress Response Selected over ten years for high blood corticosteroid levels in response to stress.	Derived from Louisiana Randombred Quail				Good	60M/120F	No	Yes	**Satterlee**
Louisiana Low Stress Response Selected over ten years for low blood corticosteroid levels in response to stress.	Derived from Louisiana Randombred Quail				Good	60M/120F	No	Yes	**Satterlee**
Ohio HP Inbreeding coefficient (F)=0.36; selected 30 generations for increased plasma phosphorus in the female two weeks after start of lay.	Derived from Ohio R1				Poor	36M/36F	No	Yes	**Nestor**
Ohio LP Inbreeding coefficient (F)=0.394; selected 30 generations for decreasing levels of plasma phosphorus in the female two weeks after start of lay.	Derived from Ohio R1				Poor	36M/36F	No	Yes	**Nestor**
UBC RES Selected for resistance to atherosclerosis when fed high cholesterol diets.	Acquired from NCSU in 1988				Poor	24M/48F	No	Yes	**Cheng**
UBC SUS Selected for susceptibility to atherosclerosis when fed high cholesterol diets.	Acquired from NCSU in 1988				Poor	48M/96F	No	Yes	**Cheng**

Table 2.1 Stock information

Category Stock name and description	Origin and history	Breed	Genetic characteristics	Allele symbol	Status	Number of birds	Cryo-preserv.	Available	Curator
Turkey									
Mutant-Developmental defect-Eye									
UMass Glaucoma *Glaucoma* homozygotes tend to develop glaucoma and become blind.	Naturally mating, exhibition-type turkey; in the process of transfer to private curator.	Slate		*ga*	Dispersal in 1998	10M/25F	No	Yes	**Smyth**
Mutant-Reproductive defect									
Guelph Parthenogenetic Turkey Selected for spontaneous development of 40% unfertilized eggs (parthenogenetic development), with 0.5% of developing embryos (all male) hatching.	Originally developed at USDA laboratories in Beltsville, MD, by Olsen in the 1970s	Beltsville Small White	multifactorial		Poor	10M/30F	No	Yes	**Etches**
Pure breed									
NCSU Black Spanish	Acquired from Ohio State U in 1980; kept as closed flock used in research and teaching	Black Spanish			Fair	5M/10F	No	Yes	**Christensen**
NCSU Bronze	Acquired from Ohio State U in 1980; kept as closed flock used in research and teaching	Bronze			Fair	5M/15F	No	Yes	**Christensen**
NCSU Slate	Acquired from Ohio State U in 1980; kept as closed flock used in research and teaching	Slate			Fair	5M/15F	No	Yes	**Christensen**
Saskatchewan Bronze Turkey Resembles commercial turkeys from the 1940s (carcass and production characteristics) and is able to breed naturally; used in cardiac, digestive, and reproductive physiology teaching and research.	Acquired from Ridley (a breeder in Saskatoon area) in the 1980s; resembles old commercial stocks	Bronze			Good	30M/80F	No	With collaboration	**Classen**
Wisconsin Midget White Midget white turkey, males=12 lb, females=8lb.	Developed by J. Smyth (U Massacusetts); acquired in 1972 and kept as closed flock	Midget White			Good	120	No	Yes	**Wentworth**
Randombred									
NADC Turkey National Animal disease Center research stock.	Originally from USDA Beltsville turkey stocks; kept as closed flock for over 30 years; recently sent to Southeast Poultry Res. Lab.	Beltsville Small White			Good	70-90	No	Yes	**Rimler**
NCSU Ohio-RBC1	Acquired from Ohio State U in 1980; kept as closed flock	Large White			Good	10M/60F	No	Yes	**Christensen**
NCSU Ohio-RBC2	Acquired from Ohio State U in 1980; kept as closed flock	Large White			Good	10M/60F	No	Yes	**Christensen**
Ohio RBC1 Inbreeding coefficient (F) approximately 0.148.	Derived from a cross of four commercial turkey strains in 1957	Large White			Poor	36M/36F	No	Yes	**Nestor**
Ohio RBC2 Inbreeding coefficient (F) approximately 0.12.	Derived from a cross of two commercial turkey strains in 1966	Large White			Poor	36M/36F	No	Yes	**Nestor**

Table 2.1 Stock information

Category Stock name and description	Origin and history	Breed	Genetic characteristics	Allele symbol	Status	Number of birds	Cryo-preserv.	Available	Curator
Turkey (cont.)									
Randombred (cont.)									
Ohio RBC3 Inbreeding coefficient (F) approximately 0.033.	Derived from a cross of Ohio F Line with commercial turkey strains in 1986	Large White			Poor	36M/36F	No	Yes	**Nestor**
Wisconsin Broad-breasted Bronze Old commercial-type turkey.	Derived from Trylor Bronze of Jerome Organization in N. Wisc.; kept as closed flock since 1969	Broad-breasted Bronze			Good	30M/200F	Semen, PGC	Yes	**Wentworth**
Wisconsin Broad-breasted White Old commercial-type turkey.	Derived from Nicholas X Ralston synthetic meat cross developed at Washington State U; kept as closed flock since 1969	Broad-breasted White			Good	30M/200F	Semen, PGC	Yes	**Wentworth**
Selected-Egg trait									
NCSU Ohio-E Selected for increased egg production.	Derived from Ohio-E; kept as closed flock	Large White			Good	10M/60F	No	Yes	**Christensen**
Ohio E Line Inbreeding coefficient (F)=0.478; selected 38 generations for increased egg production.	Derived from Ohio RBC1	Large White			Poor	72M/72F	No	Yes	**Nestor**
Selected-Growth trait									
NCSU Ohio-F Selected for increased body weight at 16 weeks.	Derived from Ohio-F; kept as closed flock	Large White			Good	10M/60F	No	Yes	**Christensen**
Ohio F Line Inbreeding coefficient (F)=0.26; selected 30 generations for increased 16-week body weight.	Derived from Ohio RBC2	Large White			Poor	36M/72F	No	Yes	**Nestor**
Ohio FL Line Inbreeding coefficient (F)=0.274; selected 17 generations for increased shank width.	Derived from Ohio F line	Large White			Poor	36M/54F	No	Yes	**Nestor**

Table 2.1 Stock information

Category Stock name and description	Origin and history	Breed	Genetic characteristics	Allele symbol	Status	Number of birds	Cryo-preserv.	Available	Curator
Waterfowl/Gamebird									
Bloodtype-Gene pool									
NIU Bobwhites Various erythrocyte alloantigens in quail.	Acquired from Mississippi State U in 1992	Northern Bobwhite		see description	Fair	50+	No	With collaboration	**Briles**
NIU Pheasants Population segregating for a variety of MHC B haplotypes.	Acquired from state gamebird hatcheries in Wisconsin and Illinois in 1986	Ring-necked Pheasant		see description	Fair	50+	No	With collaboration	**Briles**
Pure breed									
ADOL Pekin Duck Specific pathogen free, probably moderately inbred, reproduced 2X/year.	Kept as closed flock since the 1960s	Pekin Duck			Good: USDA	8M/35F	No	Yes	**Bacon**
Cornell White Pekin Commercial duck stock.	Specific pathogen-free	Pekin Duck			Good	9M/39F	No	Yes, fee	**Schat**
NCSU Brown China	Kept as closed flock; used in research and teaching	Brown Chinese Goose			Fair	10M/15F	No	Yes	**Christensen**
NCSU Pilgrim	Kept as closed flock; used in research and teaching	Pilgrim Goose			Fair	10M/15F	No	Yes	**Christensen**
Saskatchewan Pilgrim Goose Goose breed with sexually dimorphic colors; used in teaching bird handling in agriculture and veterinary medicine classes.	Acquired from Agriculture-Canada (CFAR) in 1965	Pilgrim Goose			Good	9M/18F	No	With collaboration	**Classen**
Saskatchewan Rouen Duck Used in teaching bird handling in agriculture and veterinary medicine classes.	Acquired from Miller Hatcheries in Saskatoon in 1965	Rouen Duck			Good	12M/24F	No	With collaboration	**Classen**

Excerpt from "Avian Genetic Resources at Risk: An Assessment and Proposal for Conservation of Genetic Stocks in the USA and Canada". 1999. J.M. Pisenti, M.E. Delany, R.L. Taylor, Jr., U.K. Abbott, H. Abplanalp, J.A. Arthur, M.R. Bakst, C. Baxter-Jones, J.J. Bitgood, F.A. Bradley, K.M. Cheng, R.R. Dietert, J.B. Dodgson, A.M. Donoghue, A.B. Emsley, R.J. Etches, R.R. Frahm, R.J. Gerrits, P.F. Goetinck, A.A. Grunder, D.E. Harry, S.J. Lamont, G.R. Martin, P.E. McGuire, G.P. Moberg, L.J. Pierro, C.O. Qualset, M.A. Qureshi, F.T. Shultz, and B.W. Wilson. Report No. 20. University of California Division of Agriculture and Natural Resources, Genetic Resources Conservation Program, Davis CA USA. 120 p.