

7 References

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Appendices

Appendix A – Sample information

FR-number	Band nr.	Age	Sex	Date	Sample type
FR-10-001		Juv	F	8.9.2005	Tissue
FR-10-002		3rd yr	M	Unknown	Tissue
FR-10-003	119374	Juv	M	22.8.2004	Tissue
FR-10-004	134313	Juv	F	20.11.2009	Tissue
FR-10-005		Juv	F	07.2009	Tissue
FR-10-006		Juv	M	2.3.2010	Tissue
FR-10-007		Juv	M	Fall 2002	Tissue
FR-10-008		Juv	M	14.2.2010	Tissue
FR-10-009		Juv	M	25.12.2006	Tissue
FR-10-010		Juv	M	15.1.2010	Tissue
FR-10-011		Juv	F	27.10.2009	Tissue
FR-10-012		Juv	M	12.1.2010	Tissue
FR-10-013		2nd yr	F	22.8.2007	Tissue
FR-10-014		Juv	M	5.5.2008	Tissue
FR-10-015		Juv	M	2.9.2008	Tissue
FR-10-016		Juv		Unknown	Tissue
FR-10-017		Ad	M	30.8.2008	Tissue
FR-10-018	123975	Juv	M	17.5.2009	Tissue
FR-10-019		Juv	F	21.10.2009	Tissue
FR-10-021		Juv	F	Unknown	Tissue
FR-10-022		Juv	M	30.5.2009	Tissue
FR-10-023		Juv	F	Unknown	Tissue
FR-10-024	114986	Juv	F	Unknown	Tissue
FR-10-026	132489	Juv	F	24.11.2006	Tissue
FR-10-029		Juv	F	9.3.2001	Tissue
FR-10-030		2nd yr	F	28.10.2005	Tissue
FR-10-031	115203	Juv	F	Unknown	Tissue
FR-10-032		2nd yr	M	28.11.2001	Tissue
FR-10-033		Juv	M	11.10.2005	Tissue
FR-10-034		Juv	F	19.1.2009	Tissue
FR-10-035	117949	Juv	F	22.8.2002	Tissue
FR-10-036		Juv	M	11.2.2005	Tissue
FR-10-037		Juv	M	Unknown	Tissue
FR-10-038		Juv	M	Unknown	Tissue
FR-10-039		Juv	M	28.9.1999	Tissue
FR-10-040		Juv	F	Júni 2009	Tissue
FR-10-041		Juv	M	Unknown	Tissue
FR-10-042		Ad	F	August 2008	Tissue
FR-10-043		Juv	F	15.4.2006	Tissue
FR-10-044		Ad	F	16.10.2007	Tissue
FR-10-045		Juv	F	22.9.2006	Tissue
FR-10-046		Juv	F	21.10.2005	Tissue
FR-10-047		2nd yr	M	22.10.2006	Tissue
FR-10-048	132324	Juv	F	7.5.2004	Tissue
FR-10-049		Ad	F	7.5.2003	Tissue

FR-10-050	132325	Ad	F	13.3.2007	Tissue
FR-10-052	117912	Juv	F	17.1.2001	Tissue
FR-10-053		Ad	F	22.8.2006	Tissue
FR-10-054		Juv	F	22.5.2006	Tissue
FR-10-055		Juv	M	Unknown	Tissue
FR-10-056		Juv	F	Unknown	Tissue
FR-10-057		Juv	F	Med sept '08	Tissue
FR-10-058		Juv	M	15.10.2003	Tissue
FR-10-059		Juv	M	16.8.2003	Tissue
FR-10-060		Juv	M	nov/des 2004	Tissue
FR-10-061		Juv	M	1.3.2008	Tissue
FR-10-062		3rd yr	F	20.1.2009	Tissue
FR-10-063		Ad	F	Unknown	Tissue
FR-10-064		Juv	M	2.4.2008	Tissue
FR-10-065	119388	Juv	M	16.3.2005	Tissue
FR-10-066		1yr	F	10.6.2008	Tissue
FR-10-067	118985	Juv	M	Unknown	Tissue
FR-10-068	132717	Juv	F	3.10.2007	Tissue
FR-10-069		1yr	F	2.5.2002	Tissue
FR-10-070	112518	Ad	F	Unknown	Tissue
FR-10-071		Juv	F	7.1.2009	Tissue
FR-10-072	17978	3rd yr	M	Unknown	Tissue
FR-10-073		Ad	F	1/3 2001	Tissue
FR-10-074		Pull		25.6.2009	Tissue
FR-10-075		Pull		28.6.2004	Tissue
FR Sauðanes			F	22.8.2007	Tissue
FR AK			M	8.12.2006	Tissue
FR RVK			M	15.1.2010	Tissue
FR ESK			M	20.1.2010	Tissue
01 KF M 04		Ad	F	2004	Feather
02 KF S 04	119387	Juv		2004	Feather
03 KF S 04	119389	Juv		2004	Feather
04 KF S 07		Ad		2007	Feather
05 GH M 04		Ad	F	2004	Feather
06 GH S 04	119386	Juv		2004	Feather
07 GH M 05		Ad	F	2005	Feather
08 GH S 05	17977	Juv		2005	Feather
09 GH S 05	132468	Juv		2005	Feather
10 P M 02		Ad	F	2002	Feather
11 P S 02	123527	Juv		2002	Feather
12 P S 02	123528	Juv		2002	Feather
13 P M 03		Ad	F	2003	Feather
14 P S 03	132317	Juv		2003	Feather
15 P S 03	132318	Juv		2003	Feather
16 P S 03	132319	Juv		2003	Feather
F. gil		Ad	F	2010	Feather
F.gil		Ad	F	2010	Feather

Appendix B – Laboratory protocols

Isopropanol clean up protocol

- Add 40 µl of 75% isopropanol to the PCR mixture and vortex for 5 – 10 seconds.
- Incubate at room temperature for 15 minutes
- Centrifuge for 30 minutes at 14000 rpm and discard supernatant
- Add 100 µl of 75% isopropanol to the Eppendorf tube and vortex for 5-10 seconds.
- Centrifuge for 5 minutes at 14000 rpm and discard supernatant
- Place Eppendorftubes (keep them open) on a hot plate at 90°C for 1 minute
- Dissolve pellet in 10 µl of HiDiFormamide and vortex.
- Place Eppendorftubes on a hot plate at 95°C for 2 min and vortex.
- Samples are then ready for sequencing.

Appendix C – Nucleotide sequences, CHD-Z

Falco rusticolus CHD1Z gene for chromo-helicase-DNA binding protein, partial cds.

CHD

>101130-39_I14_1133ZAA010.ab1

```
GCGATGCTCNTCTTACTGTTCTTTTTTTACTGTTACAGTTACTGACTTGTCTT  
TATTTGCTGTTGATTGTTGGGGTTGTTGTCAGGTTGGGGTTTTCCACTTT  
CTGAACACATTTTTCAAAATAAGAAAAATTATTTATGTTGTTAATCATCTGGCTT  
GAACTGCAATTGAAATTCAAATCACCTTAAGGGAAGTGAAGGGAGGCCAGTAGGA  
CCCCCCAAACTCTGGATCTGATAGGGACTCCTCTCAAAAAAAACGGCCAAAAAACG  
GGGAAAACCCCAAATCCCCGAAAAATCAAAGGATTAGCGATGCAAAA
```

Falco rusticolus CHD1Z gene for chromo-helicase-DNA binding protein, partial cds.

>101130-39_G16_1133ZAA011.ab1

```
TTCTCACAGATGGTGAGGATGCTGGATATCCTAGCAGAATATCTGAAGTATCGTCAGTTCC  
CTTTCAGGTAAAGAATCTGGTAGTAGCTGCATGAAGCTTGATCTGAATACAAGAGTATT  
TTCTTACTCTGAGGATTACAGAGCAACGTACAAGTTGTCAGAAGTTGCGGAATCTCCAT  
CCTCTATAACATTAAAAGCCATGTGGACAAGACCTGGCAACCTGCTTAGCTGTCCCCA  
TCTGAGTAGGGGAGTTAGACAAGATGACCTCCAGAGGTCCCTCAACCTCAGCTGTTCGT  
GATATGTGATCTTACCACTTGGTTAAGAAAAGTTGTAAGAAAATTGTTCTTTCTAGAA  
AGACTAGCACTTGTATGTGCTAAGTAGTATTTGAAATTAAACAGGTGAAATAAAATATT  
ACATCAAGTGTGCATTACTCTTCCGTACGTAATGGTTTGGCAGGTGAAATTCAAGTT  
GCTGTTATTTGAATATGAGAATTACTGTTAACTGCACTGTTCAATCTCTAGAGACTG  
TGGATCAATAAAAGGGATTGAGGAAACAAGCACTGG
```

Appendix D – Nucleotide sequences, MHC

Sequences obtained using primers Fal2FC and Fal2RC

>F1-MHC_E2F2

```
TTCAACGGCACCGAGCGGGTGAAGGTCTGGTGAAGTACATCTACAACCGGCAGCAGTACA
CGCACTTCGACAGCGACCTGGGTACTTCGTGGCCGACAGCCCCGTGGCGAGTCTGTTGCG
AGGTATTTAACAGTCAGCCGGAGATATTGGAGGACCAACGGTCTGTGGCGGACAGGGTCT
GCCGGCACAACTACGAGATTAGTACCCATTCCTCGTGGGCAGGCAAGGTGAGCGCACCGC
CACACGTTCCC
```

>F2_MHC_E2F2

```
CTACAACCGGCAGCAGTACACGCACTTCGtACAGCGACCTGGGGTAACCTTCGTGGGCCG
ACAGCCCCGTGGGCAGAAGTCTTAGGTTAGGCAGGGGTAATTTAAAACAAGTCAGCCG
GAGAATAATTGGGAAGGGAACCAAAACGGTCTGGTGGCGGACAGGGTCTGGCCGGCAC
CAACTACGAAGATTAAGTACCCATTCCTCGTGGGCAGGCAAGGTGGAGGCGCACCGC
CACACGTTCCC
```

>F3_MHC_E2F2

```
CTTCAACGGCACCGAGCGGGTGAAGGTCTGGTGAAGTACATNCTACAACCGGCAGCAGTA
CACGCACCTCGACAGCGACCTGGGTACTTCGTGGCCGACAGCCCCGTGGCGAGTCTGTTG
CGAGGTATTTAACAGTCAGCCGGAGATATTGGAGGACCAACGGTCTGTGGCGGACAGGGT
CTGCCGGCACAACTACGAGATTAGTACCCATTCCTCGTGGGCAGGCAAGGTGAGCGCACCG
CCACAACGTTCCC
```

>F4_MHC_E2F2

```
TTCAACGGCACCGAGCGGGTGAAGGTCTGGTGAAGTACATCTACAACCGGCAGCAGTACA
CGCACTTCGACAGCGACCTGGGTACTTCGTGGCCGACAGCCCCGTGGCGAGTCTGTTGCG
AGGTATTTAACAGTCAGCCGGAGATATTGGAGGACCAACGGTCTGTGGCGGACAGGGTCT
GCCGGCACAACTACGAGATTAGTACCCATTCCTCGTGGGCAGGCAAGGTGAGCGCACCGC
CACACGTTCCCA
```

>C19_10E5ZAA011

```
CGGCACCGAGCGGGTGAAGGTCTGGTGAAGTACATCTACAACCGGCAGCAGTACACGCAC
TTCGACAGCGACCTGGGTACTTCGTGGCCGACAGCCCCGTGGCGAGTCTGTTGCGAGGTA
TTTTAACAGTCAGCCGGAGATATTGGAGGACCAACGGTCTGTGGCGGACAGGGTCTGCCGG
CACAACTAGAGATTAGTACCCATTCCTCGTGGGCAGGCAAGGTGAGCGCACCGCCACAC
GTTTCCCAGTGCCAC
```

>I19_10E5ZAA012

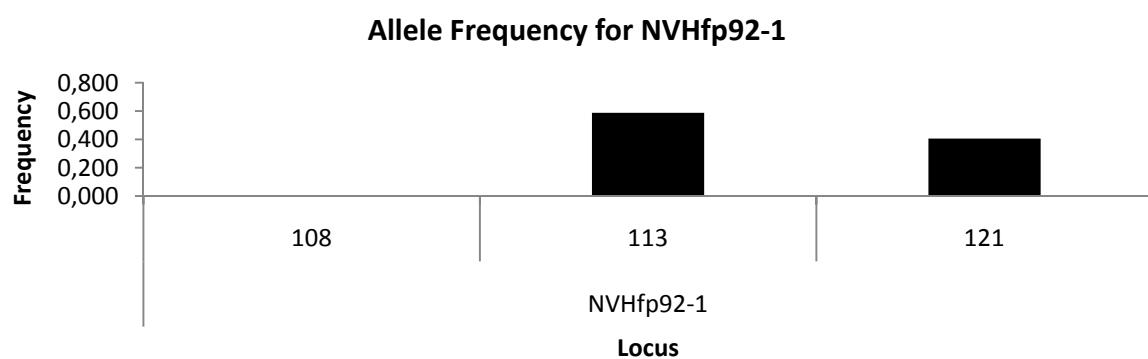
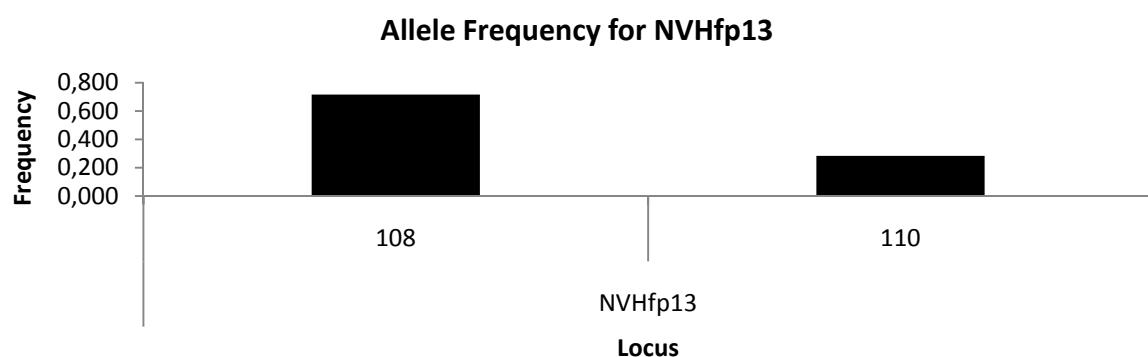
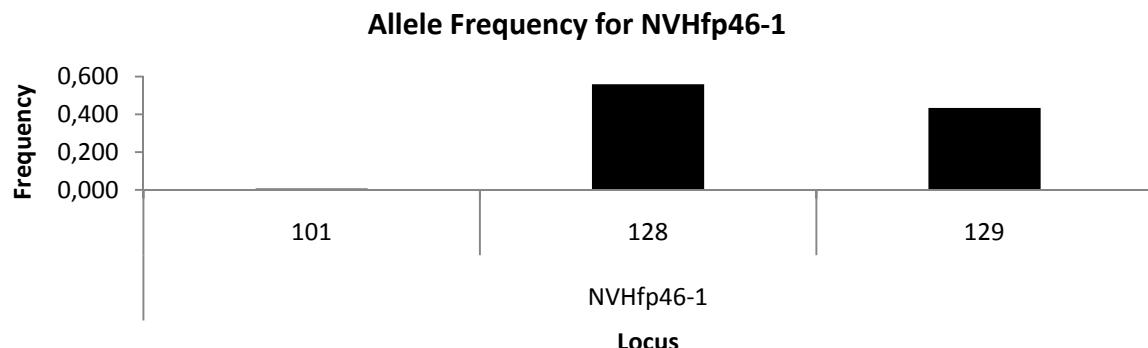
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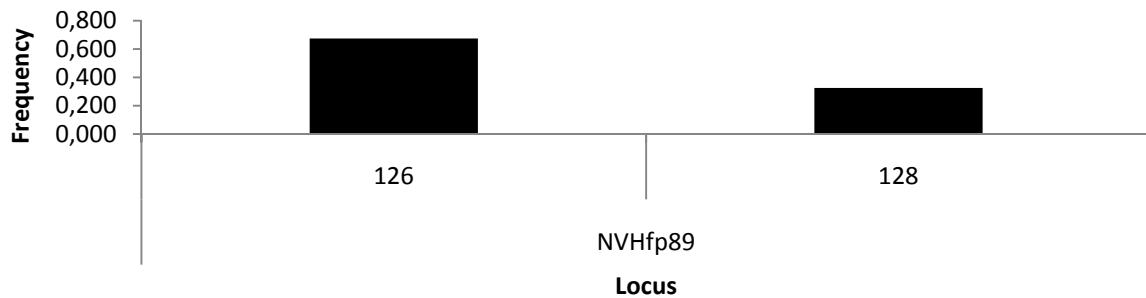
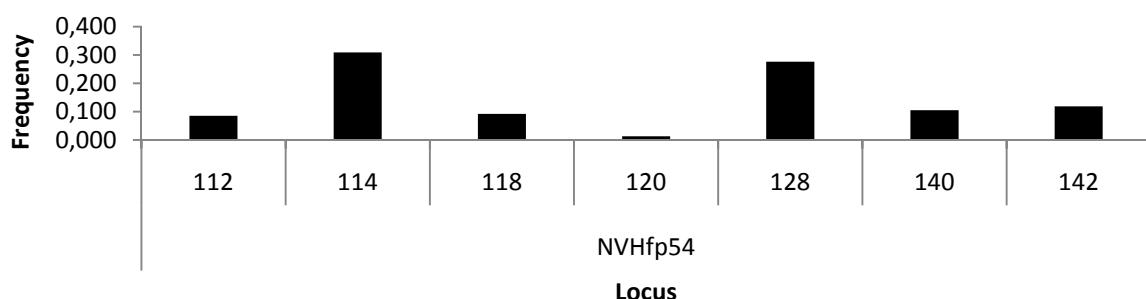
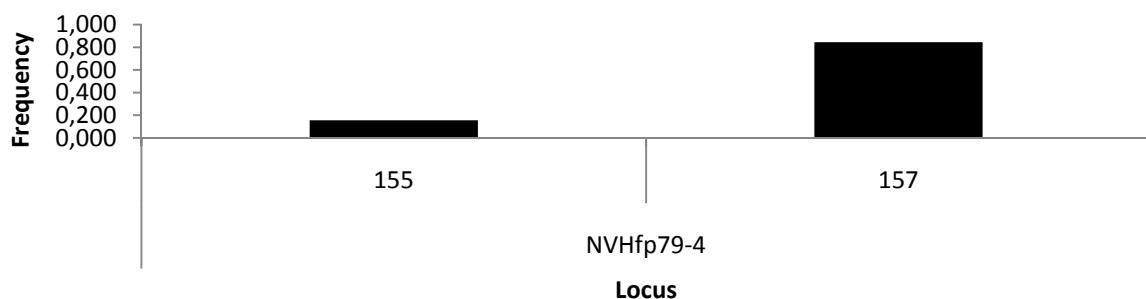
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GTTTCCCAGTGCCAC

Appendix E – Allele frequency by locus

Microsatellite allele frequencies by locus



Allele Frequency for NVHfp89**Allele Frequency for NVHfp54****Allele Frequency for NVHfp79-4****Allele Frequency for NVHfp82-2**