



Veterinary pre-purchase examination results as an indicator of subsequent athletic performance in national hunt thoroughbred horses

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Veterinary Pre-Purchase Examination Results as an Indicator of Subsequent Athletic Performance in National Hunt Thoroughbred Horses



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Volume 2 of 2

APPENDICES

**Submitted for the award of Doctor of Philosophy at the University of Limerick, April,
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Appendix 1

Year of Birth of Horses in Sample

Table A.1: Year of Birth of Horses

Year Born	Number	Proportion	Year Born	Number	Proportion
1994	1	0.01%	2002	1,708	12.56%
1996	2	0.01%	2003	1,791	13.17%
1997	10	0.07%	2004	1,622	11.92%
1998	1,110	8.16%	2005	1,516	11.14%
1999	1,610	11.84%	2006	941	6.92%
2000	1,632	12.00%	2007	5	0.04%
2001	1,654	12.16%	Unknown	1	0.01%

Appendix 2

Prevalence of All Defects Noted on Veterinary Pre-Purchase Examination Certificates

Table A.2: Prevalence of All Defects Noted on Veterinary Pre-Purchase Examination Certificates

Defects	Number of Affected Horses	Prevalence
Defect	10009	73.58%
No Defect	3594	26.42%
Skin Scar	2953	21.71%
Tarsal Plantar Desmitis	2639	19.40%
Metacarpal/Metatarsal Exostoses	2327	17.11%
Prejudicial Defect	1635	12.02%
Respiratory Noise	1335	9.81%
Wounds	986	7.25%
Sarcoid	795	5.84%
Laryngeal Paralysis	716	5.26%
Papillomas	716	5.26%
Calcaneal Bursitis	521	3.83%
Swelling	442	3.25%
SDDTS	425	3.12%
Bone Thickening	333	2.45%
Sand Cracks	332	2.44%
Wounds, lacerations	292	2.15%
Boney Growth	248	1.82%
Hoof Cracks	243	1.79%
Coronet and Heel and Over-Reach Scar	242	1.78%
Pelvic Asymmetry	241	1.77%
Enlarged Joint	215	1.58%
Skin Thickening	201	1.48%
Cardiac Defect	166	1.22%
Heart Murmur	157	1.15%
Lame	130	0.96%
Nodule	109	0.80%
Whistler	100	0.74%
Subcutaneous Thickening	99	0.73%
Unspecified Synovial Distension	99	0.73%
Aural Plaques	97	0.71%
Muscle Wastage	95	0.70%
Toed In	86	0.63%
Dishes	81	0.60%
Corneal Opacity	79	0.58%
Incomplete Exam	78	0.57%
Hoof Defect	76	0.56%
Wolf Teeth	75	0.55%
Bump	74	0.54%
Hard/Bony Swelling	72	0.53%
Tendon Thickening	71	0.52%
Cysts	71	0.52%

Parrot Mouth	63	0.46%
Corneal Scar	56	0.41%
Umbilical Hernia	56	0.41%
Skin Rash	56	0.41%
Corneal Scar	56	0.41%
Ring Worm	55	0.40%
Mud Rash	55	0.40%
Overreach	54	0.40%
Hair Loss	53	0.39%
Scar Tissue	46	0.34%
Asymmetric Feet	45	0.33%
White Hairs	43	0.32%
Haematoma	42	0.31%
Knock	39	0.29%
Tissue Thickening	38	0.28%
Lesions	37	0.27%
Lump	37	0.27%
Fibrous Growths	33	0.24%
Missing Tooth	33	0.24%
Bruise	31	0.23%
Lens Opacity	30	0.22%
Offset Knees and Cannons and Feet	30	0.22%
Fibrous Scar	27	0.20%
Thick Winded	27	0.20%
Dermatitis	26	0.19%
Skin Marks/Rubs	26	0.19%
Fibrous Thickening	25	0.18%
Wind Sucker	25	0.18%
High Blower	24	0.18%
Synovial Distension of Tarsal Digital Tendon Sheath	23	0.17%
Toed Out	22	0.16%
Rain Rash	19	0.14%
Scab	18	0.13%
Chronic Synovitis of the Talocrural Joint	18	0.13%
Facial Depression	18	0.13%
Stringhalt	18	0.13%
Occluded Jugular Vein	17	0.12%
Muscle Indentation/Depression	17	0.12%
Enlarged Gland	16	0.12%
Cataract	17	0.12%
Weave	15	0.11%
Undershot	15	0.11%
Stitches/Staples	14	0.10%
Hind Limb Inco-ordination	14	0.10%
Prophets Thumb	14	0.10%
Bite Mark	14	0.10%
Mark on Lens/Cornea	15	0.10%
Medication	13	0.10%
Bone Depression	12	0.09%

Pain/Stiffness after Flexion	11	0.08%
Irregular/Uneven Front Teeth	11	0.08%
Carpal Bursitis	10	0.07%
Flat Feet	10	0.07%
Broken Tooth	10	0.07%
Plaits	10	0.07%
Poor Hock Conformation	10	0.07%
Cardiac Arrhythmia/Irregular Heart Beat	9	0.07%
Injury	9	0.07%
Callus	9	0.07%
Prominent Vein	9	0.07%
Periostial/Bony Reaction	9	0.07%
Inflammation	9	0.07%
Girth Galls	8	0.06%
Pharyngeal Hyperplasia	8	0.06%
Ligament Thickening	8	0.06%
Oedema	8	0.06%
Bucked Shins	8	0.06%
Broken Hairs Mane and Tail	8	0.06%
Poor Knee Conformation	8	0.06%
Hobdayed	7	0.05%
Swollen Nasal Bones	7	0.05%
Exaggerated Hind Leg Movement	7	0.05%
Blemish	7	0.05%
Skin Tags/Flaps	7	0.05%
Infection	7	0.05%
Boney Scar	6	0.04%
Crib Biting	6	0.04%
Abscess	6	0.04%
Roach Back	6	0.04%
Nasal/Sinus Discharge	6	0.04%
Keratopathy in Eye	6	0.04%
Brushing	6	0.04%
Poor Pastern Conformation	6	0.04%
Colomboma/Pigmented Area in Eye	6	0.04%
Wheals	5	0.04%
Overgrown Feet	5	0.04%
Hoof Thickening	5	0.04%
Jugular Vein Occlusion	5	0.04%
Allergic Wheals	5	0.04%
Hernia	5	0.04%
Growth/Mass	5	0.04%
Old Fracture	5	0.04%
Enlarged Corpus Nigrans	5	0.04%
Dislodged/Displaced Tooth	5	0.04%
Unusual Gait/Action	5	0.04%
Poor Fetlock Conformation	5	0.04%
Forelimb Conformation	5	0.04%
Refractive Lenses	5	0.04%
Boxy Feet	4	0.03%

Shiverer	4	0.03%
Acquired Bursas	4	0.03%
Missing Ear Tip	4	0.03%
Corneal Oedema	4	0.03%
Damaged Incisor	4	0.03%
Different Aged Teeth	4	0.03%
Moves Close (not brushing)	4	0.03%
Hind limb Conformation	4	0.03%
Bare/Worn Feet	3	0.02%
Enlarged Spermatic Cord	3	0.02%
Fluid Thickening	3	0.02%
Box Walk	3	0.02%
Sunburn	3	0.02%
Ingrown Hairs	3	0.02%
Deformed Tracheal Rings	3	0.02%
Colic at Sale	3	0.02%
Skin Plaques	3	0.02%
Fluid Accumulation	3	0.02%
Muscle Atrophy	3	0.02%
Hunters Bump	3	0.02%
Eye Ulcer	3	0.02%
Impaired Vision	3	0.02%
Extra Tooth	3	0.02%
Skin Ulcer	2	0.01%
Hooves in Poor Condition	2	0.01%
Cutaneous Thickening	2	0.01%
Muscle Tremor	2	0.01%
Birth Mark	2	0.01%
Fluid Distension	2	0.01%
Musculature Depression	2	0.01%
Wobbler	2	0.01%
Caslicks	2	0.01%
X Rays	2	0.01%
Tendonitis	2	0.01%
Abnormal Tendons	2	0.01%
Granulation Tissue	2	0.01%
Hygroma	2	0.01%
Sacroiliac Strain	2	0.01%
Tilted/Rotated Pelvis	2	0.01%
Fibroma	2	0.01%
Schirrous Cord	2	0.01%
Depigmentation	2	0.01%
Cough	2	0.01%
Sweet Itch	2	0.01%
Ringbone	2	0.01%
Tooth Injury	2	0.01%
Retained Tooth	2	0.01%
Abnormal Wear on Teeth	2	0.01%
Teething Bumps	2	0.01%
Sharp Molars	2	0.01%

Wide Front Action	2	0.01%
Pinfired	2	0.01%
Imbalanced Foot	2	0.01%
Septic Foot	2	0.01%
Deformed Ear	2	0.01%
Part of Eyelid Missing	2	0.01%
Eye Scar Tissue	1	0.01%
Dorsal Displacement of the Palatopharyngeal Arch (R.D.P.A.)	1	0.01%
Epiglottic Entrapment	1	0.01%
Pharyngeal Growth	1	0.01%
Collapsed Alar Folds	1	0.01%
Thickened Tracheal Ring	1	0.01%
Keratinised Hair Follicles	1	0.01%
Bowed Tendon	1	0.01%
Olecranon Bursitis	1	0.01%
Lipoma	1	0.01%
Suspected Fracture	1	0.01%
Sidebone	1	0.01%
Osteoarthritis of the Tarsal Joint	1	0.01%
Eye Distension	1	0.01%
Conjunctivitis	1	0.01%
Tooth Irregularity	1	0.01%
Erupting Teeth	1	0.01%
Prominent Incisor Tooth	1	0.01%
Tooth Scar	1	0.01%
Malerupted Tooth	1	0.01%
Black Incisors	1	0.01%
Changing Incisors	1	0.01%
Crowded Incisors	1	0.01%
Elongated Incisor	1	0.01%
Gap in Incisors	1	0.01%
Irregular Eruption	1	0.01%
Unerupted Tooth	1	0.01%
Inhibited Action	1	0.01%
Poor Horn Quality in Hoof with no Periople	1	0.01%
Club Foot	1	0.01%
Coronet Damage	1	0.01%
Greasy Heel	1	0.01%
Growth Rings on Feet	1	0.01%
Broad Feet	1	0.01%
Lack of Lateral Hoof Support	1	0.01%
Intermittant Hoof Drag	1	0.01%
Long Toe with Low Heel	1	0.01%
Ossification of Lateral Hoof Cartilage	1	0.01%
Misshapen Hoof	1	0.01%
Flared Out Hoof Wall	1	0.01%
Upright Hoof Wall	1	0.01%
Pads on Front Feet	1	0.01%

Raised Coronary Band	1	0.01%
Sheared Heel	1	0.01%
Seedy Toe	1	0.01%
Sore on Heel	1	0.01%
Line in Hoof Horn	1	0.01%
Thin Soles	1	0.01%
Unpigmented Hoof Growth	1	0.01%
Bent Tail	1	0.01%
Sunken Tail Area	1	0.01%
Tail Deviation	1	0.01%
Abnormal Skin	1	0.01%
Bedsore on Hocks	1	0.01%
Skin Condition	1	0.01%
Very Delicate Skin	1	0.01%
Ligamentous Abnormality on Cannon	1	0.01%
Changes to Point of Hock	1	0.01%
Elongated Metacarpal/Metatarsal		
Exostoses	1	0.01%
Left Hind Placed Centrally Under Horse	1	0.01%
Linefired Hock	1	0.01%
Plantar Annular Ligament Constriction	1	0.01%
Partially Removed Metacarpal/Metatarsal		
Exostoses Bone	1	0.01%
Partial Upward Fixation of Patella	1	0.01%
Physical Abnormality Left Fore	1	0.01%
Shin Metacarpal/Metatarsal Exostoses	1	0.01%
Significantly Restricted Mobility of		
Fetlock	1	0.01%
Increased Joint Tension in Knee	1	0.01%
Pressure Sores on Hocks	1	0.01%
Throws Out Right Fore Leg	1	0.01%
Tight Patella Ligament	1	0.01%
Buck Shin	1	0.01%
Sore Back During Flexion	1	0.01%
Collagen Necrosis on Back	1	0.01%
Delayed Repositioning of Hind Leg After		
Flexion	1	0.01%
Dipped Back	1	0.01%
Engleberry on Abdomen	1	0.01%
Eruption Bumps on Mandible	1	0.01%
Excess Skin on Umbilicus	1	0.01%
Fibrous Tissue	1	0.01%
Foot Penetration	1	0.01%
Fungal-Like Lesions	1	0.01%
Ganglion	1	0.01%
Gristle on Knee	1	0.01%
Head Tilt during Lunging	1	0.01%
Increased movement in Sacrum	1	0.01%
Irregular Vein Pattern Tracheal Area	1	0.01%
Irritation of Spinal Area	1	0.01%

Sire of a Yearling	1	0.01%
Keratinized Ergot	1	0.01%
Black spots on White Pastern	1	0.01%
Asymmetrical Laryngeal Cartilage	1	0.01%
Prominent Nerve	1	0.01%
Oblique Seal on Cannon	1	0.01%
Fat Pad Anterior to Teats	1	0.01%
Photosensitization with Oedema	1	0.01%
Proud Flesh	1	0.01%
Puffy Knees	1	0.01%
Blood Blister	1	0.01%
Bang to Eye	1	0.01%
Skin Eczema	1	0.01%
Flattening at Withers	1	0.01%
Small Intermandibular Gland	1	0.01%
Varicosity on Cannon	1	0.01%
Soft Tissue Protuberance	1	0.01%
Sore Left Shoulder, Likely to Affect Racing Performance	1	0.01%
Suturitis at Fronto-Nasal Suture	1	0.01%
Thickened Bridge Between Mandibles	1	0.01%
Thickened Crest of Man	1	0.01%
Thrush	1	0.01%
Corneal Cloud on Eye	1	0.01%
Fibrin Strands on Lens	1	0.01%
Iris Tag	1	0.01%
Defect in Lens	1	0.01%
Lens Sclerosis	1	0.01%
Blocked Tear Duct	1	0.01%
Uviety in Eye	1	0.01%
Retinal Changes in Eye	1	0.01%
Prominent Onion Rings in Eye	1	0.01%
Detached Corpus Nigrans	1	0.01%
Prominent Lens Facet	1	0.01%
Surgically Removed Eye	1	0.01%
Irregular Iris	1	0.01%
Corneal Blemish	1	0.01%
Non-Pigmented Portion of Eye	1	0.01%
Vitreous Floaters in Eye	1	0.01%
Damaged Gum	1	0.01%
Grinded Down Molar Caps	1	0.01%
Tushes Erupting	1	0.01%

Appendix 3

Traits Significantly Affected by Year of Birth

Table A.3: Chi-Square Results for the Traits Significantly Affected by Year of Birth

	Chi-Square	Significance
Selling Status	153.089	<0.001
Defects	100.278	<0.001
Prejudicial Defects	136.071	<0.001
Respiratory Defect	106.567	<0.001
Respiratory Noise	78.222	<0.001
Whistler	41.704	<0.001
Laryngeal Paralysis	70.403	<0.001
Pharyngeal Hyperplasia	16.325	0.038
Cardiac Defect	22.950	0.003
Heart Murmur	20.946	0.007
Lame	25.581	0.001
Metacarpal/Metatarsal	62.408	<0.001
Exostoses		
SDDTS	46.203	<0.001
Sand Cracks	21.620	0.006
Sarcoid	28.279	<0.001
Papillomas	22.762	0.004
Tendon Thickening	23.713	0.003
Fibrous Thickening	15.872	0.044
Bone Thickening	21.449	0.006
Enlarged Joint	22.934	0.003
Muscle Wastage	20.045	0.010
Weaving	17.040	0.030
Boxy Feet	15.980	0.043
Nodules	16.888	0.031
Bony Growth	61.289	<0.001
Pelvic Asymmetry	44.430	<0.001
Rain Rash	24.883	0.002
Allergic Weals	20.388	0.009
Skin Rash	18.806	0.016
Knock	20.207	0.010
Swelling	16.248	0.039
Aural Plaques	34.405	<0.001
Hair Loss	17.867	0.022
Deformed Tracheal Rings	19.239	0.014
Depigmentation	22.479	0.004
Cataracts	26.831	0.001
Sharp Molars	22.479	0.004
Asymmetric Feet	21.132	0.007
Toed In Feet	33.087	<0.001
Offset Knee/Cannon/Foot	20.605	0.008
Skin Scar	53.616	<0.001
Scabs	22.649	0.004

Appendix 4

Prevalence of Some Other Defects in Horses Sold and Not Sold

Table A.4: Comparison of the Prevalence of Some Other Defects in Horses Sold and Not Sold

	Sold	Not Sold	Chi-Square	Significance
Pain/Stiffness after Flexion	2 0.0%	6 0.2%	12.683	<0.001
Incomplete Examination	27 0.3%	19 0.7%	9.405	0.002
Keratopathy of Eye	2 0.0%	3 0.1%	4.045	0.044
Irregular/Uneven Front Teeth	4 0.0%	7 0.2%	10.713	0.001
Different Aged Teeth	0 0.0%	3 0.1%	10.356	0.001
Poor Front limb Conformation	2 0.0%	3 0.1%	4.045	0.044
Offset Knees/Cannons/Feet	17 0.2%	12 0.4%	5.969	0.015
Muscle Wastage	56 0.6%	26 0.9%	4.046	0.044
Boney Growth	165 1.7%	65 2.3%	4.515	0.034
Boxy Feet	0 0.0%	3 0.1%	10.356	0.001
Wounds/Lacerations	187 1.9%	82 2.9%	10.139	0.001
Girthgalls	3 0.0%	5 0.2%	7.365	0.007
Injury	3 0.0%	5 0.2%	7.365	0.007
Bruise	18 0.2%	11 0.4%	3.991	0.046
Skin Scar	2,112 21.3%	667 23.2%	4.803	0.028
Birthmark	0 0.0%	2 0.1%	6.903	0.009

Appendix 5

Effect of Sex on Racing Performance

Table A.5: Effect of Sex on Racing Performance

Variable	Sex	n	Mean \pm S.E.	t-value	Sig.
Age at First Race	Mare	1,030	5.07 \pm 0.025	1.093	0.274
	Gelding	3,148	5.04 \pm 0.015		
Mean Number of Starts per Year Raced	Mare	1,030	3.40 \pm 0.059	-1.664	0.096
	Gelding	3,148	3.51 \pm 0.032		
Starts at Age 4 Years	Mare	1,030	0.53 \pm 0.043	-1.213	0.225
	Gelding	3,148	0.59 \pm 0.024		
Starts at Age 5 Years	Mare	1,030	2.51 \pm 0.079	0.760	0.447
	Gelding	3,148	2.44 \pm 0.043		
Mean Proportion of Non-Finished Races per Start	Mare	1,030	27.57 \pm 0.995	1.574	0.116
	Gelding	3,148	25.83 \pm 0.485		
Places at Age 7 Years Strike Rate	Mare	395	14.23 \pm 1.125	-1.311	0.190
	Gelding	1,772	15.89 \pm 0.546		
Wins at Age 8 Years Strike Rate	Mare	210	6.91 \pm 1.476	-1.149	0.251
	Gelding	1,293	8.48 \pm 0.495		
Places at Age 8 Years Strike Rate	Mare	210	13.61 \pm 1.386	-1.367	0.172
	Gelding	1,293	15.80 \pm 0.605		

Appendix 6

Effect of Selling Status on Racing Performance

Table A.6: Effect of Selling Status on the Proportion of Horses Racing at Various Ages

Variable	Group	Selling Status	n	%	Chi-Square	Sig.
Raced at Age 7 Years	All Horses	Sold	1,637	52.1	1.528	0.466
		Not Sold	386	50.2		
		Withdrawn	146	54.3		
	Mare	Sold	292	39.3	1.310	0.520
		Not Sold	83	35.2		
		Withdrawn	20	39.2		
	Gelding	Sold	1,343	56.0	0.376	0.828
		Not Sold	303	57.0		
		Withdrawn	126	57.8		
Raced at Age 8 Years	All Horses	Sold	1,162	36.9	5.259	0.072
		Not Sold	252	32.8		
		Withdrawn	91	33.8		
	Mare	Sold	162	21.8	3.331	0.189
		Not Sold	40	16.9		
		Withdrawn	8	15.7		
	Gelding	Sold	998	41.6	1.434	0.488
		Not Sold	212	39.8		
		Withdrawn	83	38.1		

Table A.7: Effect of Selling Status on Racing Performance

Means with the same letter are not significantly different from each other

Variable	Group	Selling Status	n	Mean \pm S.E.	Sig.
Mean Number of Starts	All Horses	Sold	3,145	3.51 \pm 0.032	a
		Not Sold	769	3.38 \pm 0.067	a
		Withdrawn	269	3.45 \pm 0.119	a
	Mares	Sold	743	3.54 \pm 0.068	a
		Not Sold	236	3.26 \pm 0.132	a
		Withdrawn	51	3.25 \pm 0.259	a
	Geldings	Sold	2,398	3.53 \pm 0.036	a
		Not Sold	532	3.44 \pm 0.077	a
		Withdrawn	218	3.50 \pm 0.133	a
Starts at Age 6 Years	All Horses	Sold	3,145	2.99 \pm 0.054	a
		Not Sold	769	2.81 \pm 0.107	a
		Withdrawn	269	2.81 \pm 0.185	a
	Mares	Sold	743	2.70 \pm 0.110	a
		Not Sold	236	2.35 \pm 0.189	a
		Withdrawn	51	2.24 \pm 0.392	a
	Geldings	Sold	2,398	3.08 \pm 0.061	a
		Not Sold	532	3.01 \pm 0.130	a
		Withdrawn	218	2.94 \pm 0.209	a
Starts at Age 7 Years	All Horses	Sold	3,145	2.24 \pm 0.053	a
		Not Sold	769	2.13 \pm 0.107	a
		Withdrawn	269	2.27 \pm 0.184	a

	Mares	Sold	743	1.64+0.101	a	0.241
		Not Sold	236	1.31+0.156	a	
		Withdrawn	51	1.37+0.340	a	
	Geldings	Sold	2,398	2.43+0.062	a	0.876
		Not Sold	532	2.49+0.136	a	
		Withdrawn	218	2.48+0.211	a	
	All Horses	Sold	3,145	1.63+0.050	a	0.195
		Not Sold	769	1.50+0.102	a	
		Withdrawn	269	1.36+0.152	a	
Starts at Age 8 Years	Mares	Sold	743	0.97+0.086	a	0.052
		Not Sold	236	0.58+0.110	a	
		Withdrawn	51	0.73+0.260	a	
	Geldings	Sold	2,398	1.84+0.060	a	0.218
		Not Sold	532	1.92+0.135	a	
		Withdrawn	218	1.51+0.176	a	
	All Horses	Sold	3,145	6.51+0.182	a	0.067
		Not Sold	769	5.63+0.357	a	
		Withdrawn	269	5.77+0.695	a	
Second Place Strike Rate	Mares	Sold	743	5.25+0.374	a	0.726
		Not Sold	236	4.64+0.705	a	
		Withdrawn	51	4.77+2.111	a	
	Geldings	Sold	2,398	6.90+0.208	a	0.131
		Not Sold	532	6.07+0.410	a	
		Withdrawn	218	6.01+0.703	a	
	All Horses	Sold	1,376	16.24+0.638	a	0.414
		Not Sold	420	15.11+1.181	a	
		Withdrawn	159	13.98+1.808	a	
Irish Point-to-Point Place Strike Rate	Mares	Sold	335	13.39+1.042	a	0.590
		Not Sold	123	11.43+1.907	a	
		Withdrawn	25	11.17+4.360	a	
	Geldings	Sold	1,039	17.19+0.773	a	0.491
		Not Sold	296	16.57+1.469	a	
		Withdrawn	134	14.50+1.989	a	
	All Horses	Sold	798	7.68+0.758	a	0.693
		Not Sold	132	6.09+1.600	a	
		Withdrawn	40	6.50+2.639	a	
Wins at Age 4 Years Strike Rate	Mares	Sold	174	2.92+1.005	a	0.329
		Not Sold	30	4.09+2.128	a	
		Withdrawn	6	11.11+11.111	a	
	Geldings	Sold	623	8.98+0.922	a	0.472
		Not Sold	102	6.68+1.975	a	
		Withdrawn	34	5.69+2.500	a	
	All Horses	Sold	798	14.20+0.949	a	0.354
		Not Sold	132	14.85+2.588	a	
		Withdrawn	40	8.13+2.717	a	
Places at Age 4 Years Strike Rate	Mares	Sold	174	10.56+1.747	a	0.680
		Not Sold	30	9.21+3.549	a	
		Withdrawn	6	18.06+8.718	a	
	Geldings	Sold	623	15.24+1.111	a	0.167
		Not Sold				

			Not Sold	102	16.51+3.172	a	
			Withdrawn	34	6.37+2.759	a	
Wins at Age 6 Years Strike Rate	All Horses	Sold	2,220	8.85+0.379	a	0.225	
		Not Sold	537	7.37+0.801	a		
		Withdrawn	184	8.18+1.414	a		
	Mares	Sold	470	6.32+0.701	a	0.320	
		Not Sold	149	4.35+1.165	a		
		Withdrawn	28	4.29+1.753	a		
	Geldings	Sold	1,746	9.56+0.442	a	0.606	
		Not Sold	387	8.55+1.011	a		
		Withdrawn	156	8.88+1.634	a		
Wins at Age 8 Years Strike Rate	All Horses	Sold	1,162	8.81+0.566	a	0.133	
		Not Sold	252	6.49+0.841	a		
		Withdrawn	91	6.71+1.870	a		
	Mares	Sold	162	7.64+1.852	a	0.655	
		Not Sold	40	4.20+1.747	a		
		Withdrawn	8	5.73+4.236	a		
	Geldings	Sold	998	8.95+0.586	a	0.216	
		Not Sold	212	6.92+0.942	a		
		Withdrawn	83	6.80+2.015	a		
Places at Age 8 Years Strike Rate	All Horses	Sold	1,162	15.56+0.639	a	0.988	
		Not Sold	252	15.41+1.247	a		
		Withdrawn	91	15.25+2.495	a		
	Mares	Sold	162	13.76+1.527	a	0.869	
		Not Sold	40	13.72+3.788	a		
		Withdrawn	8	9.90+4.308	a		
	Geldings	Sold	998	15.82+0.700	a	0.998	
		Not Sold	212	15.73+1.302	a		
		Withdrawn	83	15.76+2.668	a		

Appendix 7

Effect of Price Realised at Sale on Racing Performance

Table A.8: Effect of Price Realised at Sale on Racing Performance

Means with the same letter are not significantly different from each other

Variable	Group	Price at Sale (€)	n	Mean \pm S.E.	Sig.
Starts at Age 4 Years	All Horses	1-5,000	711	0.51 \pm 0.049	a
		5,001-10,000	831	0.59 \pm 0.049	a
		10,001-20,000	1,011	0.63 \pm 0.045	a
		>20,001	1,163	0.61 \pm 0.039	a
	Mares	1-5,000	388	0.53 \pm 0.074	a
		5,001-10,000	256	0.54 \pm 0.083	a
		10,001-20,000	177	0.57 \pm 0.100	a
		>20,001	102	0.68 \pm 0.145	a
	Geldings	1-5,000	322	0.48 \pm 0.063	a
		5,001-10,000	574	0.61 \pm 0.060	a
		10,001-20,000	834	0.65 \pm 0.050	a
		>20,001	1,059	0.61 \pm 0.040	a
Starts at Age 5 Years	All Horses	1-5,000	711	2.27 \pm 0.086	a
		5,001-10,000	831	2.52 \pm 0.090	a
		10,001-20,000	1,011	2.59 \pm 0.079	a
		>20,001	1,163	2.51 \pm 0.070	a
	Mares	1-5,000	388	2.37 \pm 0.122	a
		5,001-10,000	256	2.70 \pm 0.170	a
		10,001-20,000	177	2.70 \pm 0.192	a
		>20,001	102	2.75 \pm 0.261	a
	Geldings	1-5,000	322	2.15 \pm 0.121	a
		5,001-10,000	574	2.43 \pm 0.105	a
		10,001-20,000	834	2.57 \pm 0.086	a
		>20,001	1,059	2.49 \pm 0.073	a
Wins at Age 4 Years Strike Rate	All Horses	1-5,000	138	5.07 \pm 1.529	a
		5,001-10,000	199	6.12 \pm 1.229	a
		10,001-20,000	247	8.00 \pm 1.331	a
		>20,001	301	9.38 \pm 1.425	a
	Mares	1-5,000	69	3.74 \pm 2.104	a
		5,001-10,000	59	2.54 \pm 1.442	a
		10,001-20,000	41	3.29 \pm 1.689	a
		>20,001	27	1.75 \pm 1.215	a
	Geldings	1-5,000	69	6.40 \pm 2.224	a
		5,001-10,000	139	7.51 \pm 1.631	a
		10,001-20,000	206	8.94 \pm 1.553	a
		>20,001	274	10.13 \pm 1.553	a
Places at Age 4 Years Strike Rate	All Horses	1-5,000	138	9.50 \pm 1.766	a
		5,001-10,000	199	13.25 \pm 1.916	a
		10,001-20,000	247	15.98 \pm 1.864	a
		>20,001	301	15.29 \pm 1.602	a
	Mares	1-5,000	69	9.24 \pm 2.613	a
		5,001-10,000	59	9.20 \pm 2.851	a
		10,001-20,000	41	6.14 \pm 2.907	a
		>20,001			

		>20,001	27	20.33 \pm 5.513	a	
	Geldings	1-5,000	69	9.75 \pm 2.395	a	0.206
		5,001-10,000	139	15.06 \pm 2.451	a	
		10,001-20,000	206	17.94 \pm 2.136	a	
		>20,001	274	14.79 \pm 1.674	a	
Wins at Age 8 Years Strike Rate	All Horses	1-5,000	169	7.15 \pm 1.257	a	0.265
		5,001-10,000	275	7.33 \pm 1.353	a	
		10,001-20,000	400	8.58 \pm 0.879	a	
		>20,001	513	9.66 \pm 0.792	a	
	Mares	1-5,000	79	5.75 \pm 1.735	a	0.430
		5,001-10,000	61	10.77 \pm 4.301	a	
		10,001-20,000	44	4.35 \pm 1.463	a	
		>20,001	15	5.67 \pm 3.614	a	
	Geldings	1-5,000	90	8.37 \pm 1.803	a	0.128
		5,001-10,000	213	6.26 \pm 1.236	a	
		10,001-20,000	356	9.10 \pm 0.967	a	
		>20,001	497	9.72 \pm 0.808	a	
	All Horses	1-5,000	169	14.85 \pm 1.631	a	0.689
		5,001-10,000	275	15.31 \pm 1.387	a	
		10,001-20,000	400	15.50 \pm 1.044	a	
		>20,001	513	16.72 \pm 0.955	a	
	Mares	1-5,000	79	13.39 \pm 2.531	a	0.952
		5,001-10,000	61	14.51 \pm 2.307	a	
		10,001-20,000	44	13.41 \pm 3.072	a	
		>20,001	15	16.37 \pm 5.163	a	
	Geldings	1-5,000	90	16.13 \pm 2.113	a	0.895
		5,001-10,000	213	15.50 \pm 1.666	a	
		10,001-20,000	356	15.75 \pm 1.111	a	
		>20,001	497	16.69 \pm 0.973	a	

Appendix 8

Effect of Defects on Racing Performance

Table A.9: Proportion of Horses without and with Defects that Raced at Various Ages

Variable	Group	Defect	n	%	Chi-Square	Sig.
Raced at Age 7 Years	All Horses	No	552	52.3	0.100	0.752
		Yes	1,617	51.7		
	Mare	No	93	37.7	0.067	0.796
		Yes	302	38.6		
	Gelding	No	459	56.9	0.152	0.696
		Yes	1,313	56.1		
Raced at Age 8 Years	All Horses	No	398	37.7	1.794	0.180
		Yes	1,107	35.4		
	Mare	No	60	24.3	3.050	0.081
		Yes	150	19.2		
	Gelding	No	338	41.9	0.294	0.588
		Yes	955	40.8		

Table A.10: Effect of Defects on Racing Performance

Variable	Group	Defect	n	Mean \pm S.E.	t-value	Sig.
Mean Number of Starts per Year Raced	All Horses	No	1,056	3.50 \pm 0.054	0.359	0.720
		Yes	3,127	3.48 \pm 0.033		
	Mares	No	247	3.40 \pm 0.117	-0.014	0.989
		Yes	783	3.40 \pm 0.069		
	Geldings	No	807	3.53 \pm 0.061	0.392	0.695
		Yes	2,341	3.50 \pm 0.037		
Mean Number of National Hunt Starts per Year Raced	All Horses	No	1,056	2.62 \pm 0.060	1.668	0.095
		Yes	3,127	2.50 \pm 0.037		
	Mares	No	247	2.38 \pm 0.129	0.832	0.406
		Yes	783	2.25 \pm 0.074		
	Geldings	No	807	2.70 \pm 0.068	1.501	0.134
		Yes	2,341	2.58 \pm 0.042		
Mean Number of Chase Starts per Year Raced	All Horses	No	1,056	0.72 \pm 0.037	-0.434	0.664
		Yes	3,127	0.74 \pm 0.023		
	Mares	No	247	0.24 \pm 0.042	-0.779	0.436
		Yes	783	0.29 \pm 0.030		
	Geldings	No	807	0.87 \pm 0.046	-0.381	0.703
		Yes	2,341	0.89 \pm 0.028		
Starts at Age 5 Years	All Horses	No	1,056	2.44 \pm 0.073	-0.290	0.772
		Yes	3,127	2.46 \pm 0.044		
	Mares	No	247	2.53 \pm 0.158	0.118	0.906
		Yes	783	2.50 \pm 0.091		
	Geldings	No	807	2.41 \pm 0.083	-0.389	0.697
		Yes	2,341	2.45 \pm 0.051		
Starts at Age 6 Years	All Horses	No	1,056	2.99 \pm 0.093	0.542	0.588
		Yes	3,127	2.93 \pm 0.054		
	Mares	No	247	2.71 \pm 0.197	0.676	0.499
		Yes	783	2.56 \pm 0.105		

	Geldings	No	807	3.07 \pm 0.105	0.157	0.875
		Yes	2,341	3.05 \pm 0.063		
Starts at Age 7 Years	All Horses	No	1,056	2.28 \pm 0.092	0.754	0.451
		Yes	3,127	2.20 \pm 0.053		
	Mares	No	247	1.46 \pm 0.160	-0.588	0.556
		Yes	783	1.58 \pm 0.097		
	Geldings	No	807	2.54 \pm 0.109	1.032	0.302
		Yes	2,341	2.41 \pm 0.063		
Starts at Age 8 Years	All Horses	No	1,056	1.69 \pm 0.089	1.363	0.173
		Yes	3,127	1.56 \pm 0.050		
	Mares	No	247	0.98 \pm 0.146	0.924	0.356
		Yes	783	0.84 \pm 0.077		
	Geldings	No	807	1.92 \pm 0.106	1.003	0.316
		Yes	2,341	1.80 \pm 0.060		
Starts up to Age 8 Years	All Horses	No	1,056	10.08 \pm 0.245	1.320	0.187
		Yes	3,127	9.70 \pm 0.143		
	Mares	No	247	8.40 \pm 0.459	0.856	0.392
		Yes	783	7.96 \pm 0.255		
	Geldings	No	807	10.60 \pm 0.286	0.961	0.336
		Yes	2,341	10.28 \pm 0.170		
Win Strike Rate	All Horses	No	1,056	6.89 \pm 0.347	0.476	0.634
		Yes	3,127	6.70 \pm 0.212		
	Mares	No	247	4.43 \pm 0.583	0.500	0.617
		Yes	783	4.08 \pm 0.343		
	Geldings	No	807	7.67 \pm 0.413	0.217	0.828
		Yes	2,341	7.56 \pm 0.255		
Place Strike Rate	All Horses	No	1,056	13.46 \pm 0.498	0.219	0.827
		Yes	3,127	13.33 \pm 0.293		
	Mares	No	247	10.31 \pm 0.927	-0.217	0.828
		Yes	783	10.55 \pm 0.550		
	Geldings	No	807	14.42 \pm 0.582	0.235	0.814
		Yes	2,341	14.26 \pm 0.343		
Second Place Strike Rate	All Horses	No	1,056	6.57 \pm 0.325	0.989	0.323
		Yes	3,127	6.21 \pm 0.181		
	Mares	No	247	5.08 \pm 0.691	-0.017	0.986
		Yes	783	5.09 \pm 0.377		
	Geldings	No	807	7.04 \pm 0.367	1.123	0.262
		Yes	2,341	6.58 \pm 0.206		
Third Place Strike Rate	All Horses	No	1,056	5.99 \pm 0.281	0.210	0.834
		Yes	3,127	5.92 \pm 0.172		
	Mares	No	247	5.13 \pm 0.547	0.015	0.988
		Yes	783	5.12 \pm 0.340		
	Geldings	No	807	6.26 \pm 0.327	0.195	0.845
		Yes	2,341	6.19 \pm 0.200		
Overall Rate	All Horses	No	1,056	20.36 \pm 0.666	0.415	0.678
		Yes	3,127	20.03 \pm 0.396		
	Mares	No	247	14.74 \pm 1.177	0.074	0.941
		Yes	783	14.63 \pm 0.706		

	Geldings	No	807	22.08 \pm 0.783	0.291	0.771
		Yes	2,341	21.82 \pm 0.467		
National Hunt Win Strike Rate	All Horses	No	900	5.77 \pm 0.329	0.129	0.898
		Yes	2,540	5.71 \pm 0.206		
	Mares	No	197	3.08 \pm 0.521	-0.371	0.711
		Yes	602	3.34 \pm 0.365		
	Geldings	No	703	6.52 \pm 0.390	0.156	0.876
		Yes	1,935	6.45 \pm 0.254		
National Hunt Place Strike Rate	All Horses	No	900	12.73 \pm 0.562	1.059	0.289
		Yes	2,540	12.08 \pm 0.303		
	Mares	No	197	8.68 \pm 1.036	-0.375	0.708
		Yes	602	9.13 \pm 0.589		
	Geldings	No	703	13.86 \pm 0.652	1.242	0.214
		Yes	1,935	12.99 \pm 0.350		
Irish Point-to- Point Win Strike Rate	All Horses	No	471	12.77 \pm 1.081	1.196	0.232
		Yes	1,484	11.30 \pm 0.584		
	Mares	No	111	10.38 \pm 1.935	1.117	0.265
		Yes	372	8.12 \pm 0.943		
	Geldings	No	358	13.59 \pm 1.287	0.865	0.387
		Yes	1,111	12.33 \pm 0.709		
Irish Point-to- Point Place Strike Rate	All Horses	No	471	14.91 \pm 1.031	-0.941	0.347
		Yes	1,484	16.09 \pm 0.626		
	Mares	No	111	12.60 \pm 1.660	-0.110	0.912
		Yes	372	12.83 \pm 1.057		
	Geldings	No	358	15.62 \pm 1.253	-1.047	0.298
		Yes	1,111	17.20 \pm 0.755		
Mean Earnings per Race	All Horses	No	1,056	450.22 \pm 35.612	0.201	0.840
		Yes	3,127	440.54 \pm 25.210		
	Mares	No	247	224.41 \pm 35.401	0.160	0.873
		Yes	783	216.99 \pm 23.463		
	Geldings	No	807	520.45 \pm 45.044	0.087	0.930
		Yes	2,341	515.08 \pm 32.603		
Wins at Age 4 Years Strike Rate	All Horses	No	280	7.96 \pm 1.322	0.522	0.602
		Yes	690	7.19 \pm 0.773		
	Mares	No	60	3.99 \pm 1.561	0.453	0.651
		Yes	150	3.05 \pm 1.154		
	Geldings	No	220	9.05 \pm 1.622	0.411	0.681
		Yes	539	8.31 \pm 0.930		
Places at Age 4 Years Strike Rate	All Horses	No	280	14.84 \pm 1.618	0.590	0.555
		Yes	690	13.71 \pm 1.023		
	Mares	No	60	8.69 \pm 2.543	-0.771	0.442
		Yes	150	11.34 \pm 1.918		
	Geldings	No	220	16.51 \pm 1.927	0.945	0.345
		Yes	539	14.40 \pm 1.194		
Wins at Age 5 Years Strike Rate	All Horses	No	772	7.78 \pm 0.675	-0.355	0.723
		Yes	2,278	8.07 \pm 0.411		
	Mares	No	183	4.12 \pm 0.858	-0.525	0.599
		Yes	561	4.73 \pm 0.603		

	Geldings	No	588	8.93 \pm 0.840	-0.221	0.825
		Yes	1,715	9.15 \pm 0.507		
Wins at Age 6 Years Strike Rate	All Horses	No	741	8.67 \pm 0.683	0.217	0.828
		Yes	2,200	8.50 \pm 0.381		
	Mares	No	152	6.27 \pm 1.257	0.466	0.641
		Yes	495	5.63 \pm 0.655		
	Geldings	No	587	9.32 \pm 0.797	-0.037	0.971
		Yes	1,702	9.35 \pm 0.453		
Places at Age 6 Years Strike Rate	All Horses	No	741	16.36 \pm 0.856	1.639	0.101
		Yes	2,200	14.76 \pm 0.473		
	Mares	No	152	15.25 \pm 1.847	1.764	0.079
		Yes	495	11.63 \pm 0.903		
	Geldings	No	587	16.65 \pm 0.969	0.939	0.348
		Yes	1,702	15.62 \pm 0.547		
Wins at Age 7 Years Strike Rate	All Horses	No	552	8.32 \pm 0.765	-0.105	0.917
		Yes	1,617	8.42 \pm 0.444		
	Mares	No	93	3.75 \pm 1.189	-0.627	0.531
		Yes	302	4.75 \pm 0.804		
	Geldings	No	459	9.25 \pm 0.882	0.029	0.977
		Yes	1,313	9.22 \pm 0.512		
Places at Age 7 Years Strike Rate	All Horses	No	552	15.75 \pm 0.936	0.161	0.872
		Yes	1,617	15.57 \pm 0.577		
	Mares	No	93	16.02 \pm 2.565	0.886	0.376
		Yes	302	13.67 \pm 1.241		
	Geldings	No	459	15.69 \pm 1.000	-0.216	0.829
		Yes	1,313	15.96 \pm 0.649		
Wins at Age 8 Years Strike Rate	All Horses	No	398	8.51 \pm 0.817	0.270	0.787
		Yes	1,107	8.22 \pm 0.573		
	Mares	No	60	7.50 \pm 1.697	0.253	0.800
		Yes	150	6.67 \pm 1.955		
	Geldings	No	338	8.68 \pm 0.914	0.246	0.806
		Yes	955	8.41 \pm 0.588		
Places at Age 8 Years Strike Rate	All Horses	No	398	14.95 \pm 1.063	-0.607	0.544
		Yes	1,107	15.72 \pm 0.651		
	Mares	No	60	11.32 \pm 2.237	-1.046	0.297
		Yes	150	14.52 \pm 1.720		
	Geldings	No	338	15.60 \pm 1.185	-0.197	0.844
		Yes	955	15.87 \pm 0.705		
Wins up to Age 8 Years Strike Rate	All Horses	No	1,056	6.24 \pm 0.320	0.954	0.340
		Yes	3,127	5.88 \pm 0.189		
	Mares	No	247	4.26 \pm 0.566	0.525	0.600
		Yes	783	3.91 \pm 0.330		
	Geldings	No	807	6.86 \pm 0.378	0.734	0.463
		Yes	2,341	6.53 \pm 0.225		
Places up to Age 8 Years Strike Rate	All Horses	No	1,056	12.47 \pm 0.469	0.710	0.478
		Yes	3,127	12.08 \pm 0.280		
	Mares	No	247	10.00 \pm 0.909	-0.092	0.927
		Yes	783	10.10 \pm 0.538		

	Geldings	No	807	13.21 \pm 0.544	0.743	0.458
		Yes	2,341	12.74 \pm 0.328		
Wins up to Age 8 Years	All Horses	No	1,056	0.93 \pm 0.048	0.910	0.363
		Yes	3,127	0.88 \pm 0.028		
	Mares	No	247	0.51 \pm 0.065	0.461	0.645
		Yes	783	0.48 \pm 0.038		
	Geldings	No	807	1.07 \pm 0.059	0.722	0.471
		Yes	2,341	1.02 \pm 0.035		
	All Horses	No	1,056	1.81 \pm 0.076	1.241	0.215
		Yes	3,127	1.70 \pm 0.043		
Places up to Age 8 Years	Mares	No	247	1.21 \pm 0.120	0.262	0.793
		Yes	783	1.18 \pm 0.070		
	Geldings	No	807	1.99 \pm 0.092	1.153	0.249
		Yes	2,341	1.87 \pm 0.052		

Appendix 9

Effect of Prejudicial Defects on Racing Performance

Table A.11: Proportion of Horses without and with Prejudicial Defects that Raced at Various Ages

Variable	Group	Prej. Defect	n	%	Chi-Square	Sig.
Raced at Age 7 Years	All Horses	No	1,981	52.1	0.844	0.358
		Yes	188	49.6		
	Mare	No	367	38.4	0.009	0.925
		Yes	28	37.8		
	Gelding	No	1,612	56.7	2.014	0.156
		Yes	160	52.5		

Table A.12: Effect of Prejudicial Defects on Racing Performance

Variable	Group	Prej. Defect	n	Mean \pm S.E.	t-value	Sig.
Mean Number of Starts per Year Raced	All Horses	No	3,804	3.49 \pm 0.030	-1.111	0.266
		Yes	379	3.38 \pm 0.094		
	Mares	No	956	3.39 \pm 0.062	0.447	0.655
		Yes	74	3.49 \pm 0.209		
	Geldings	No	2,843	3.53 \pm 0.034	-1.573	0.116
		Yes	305	3.36 \pm 0.105		
Starts Age 6 Years	All Horses	No	3,804	2.96 \pm 0.049	-1.228	0.220
		Yes	379	2.76 \pm 0.147		
	Mares	No	956	2.62 \pm 0.097	-1.023	0.307
		Yes	74	2.26 \pm 0.319		
	Geldings	No	2,843	3.08 \pm 0.057	-1.051	0.293
		Yes	305	2.89 \pm 0.165		
Starts Age 7 Years	All Horses	No	3,804	2.22 \pm 0.048	-0.010	0.992
		Yes	379	2.22 \pm 0.160		
	Mares	No	956	1.54 \pm 0.086	0.199	0.842
		Yes	74	1.61 \pm 0.327		
	Geldings	No	2,843	2.45 \pm 0.057	-0.444	0.657
		Yes	305	2.37 \pm 0.181		
Third Place Strike Rate	All Horses	No	3,804	5.97 \pm 0.154	-0.725	0.469
		Yes	379	5.60 \pm 0.498		
	Mares	No	956	5.03 \pm 0.298	1.149	0.251
		Yes	74	6.31 \pm 1.206		
	Geldings	No	2,843	6.29 \pm 0.180	-1.489	0.137
		Yes	305	5.43 \pm 0.546		
National Hunt Place Strike Rate	All Horses	No	3,166	12.36 \pm 0.280	-1.416	0.157
		Yes	274	10.96 \pm 0.920		
	Mares	No	743	9.08 \pm 0.536	-0.422	0.673
		Yes	56	8.23 \pm 1.691		
	Geldings	No	2,420	13.36 \pm 0.324	-1.509	0.131
		Yes	218	11.67 \pm 1.068		
Irish Point-to-Point Strike Rate	All Horses	No	1,716	15.95 \pm 0.572	-0.672	0.501
		Yes	239	14.84 \pm 1.546		
	Mares	No	445	12.46 \pm 0.922	1.208	0.228

		Yes	38	16.49 \pm 3.697		
	Geldings	No	1,268	17.18 \pm 0.700	-1.405	0.160
		Yes	201	14.53 \pm 1.703		
Mean	All Horses	No	3,804	444.35 \pm 18.738	-0.206	0.837
Earnings per		Yes	379	429.34 \pm 133.310		
Race	Mares	No	956	211.69 \pm 19.039	0.792	0.431
		Yes	74	310.17 \pm 122.926		
	Geldings	No	2,843	522.70 \pm 24.062	-0.710	0.478
		Yes	305	458.25 \pm 162.986		
Wins at Age 4	All Horses	No	908	7.42 \pm 0.698	-0.050	0.960
Years Strike		Yes	62	7.28 \pm 2.237		
Rate	Mares	No	200	3.02 \pm 0.922	0.888	0.397
		Yes	10	9.17 \pm 6.855		
	Geldings	No	707	8.64 \pm 0.852	-0.536	0.592
		Yes	52	6.92 \pm 2.350		
Places at Age 4	All Horses	No	908	14.28 \pm 0.904	-1.074	0.283
Years Strike		Yes	62	10.48 \pm 2.746		
Rate	Mares	No	200	10.32 \pm 1.593	0.756	0.450
		Yes	10	15.83 \pm 6.855		
	Geldings	No	707	15.42 \pm 1.066	-1.870	0.066
		Yes	52	9.46 \pm 3.005		
Wins at Age 6	All Horses	No	2,679	8.58 \pm 0.346	-0.385	0.700
Years Strike		Yes	262	8.13 \pm 1.211		
Rate	Mares	No	607	5.77 \pm 0.611	0.013	0.990
		Yes	40	5.80 \pm 1.546		
	Geldings	No	2,067	9.43 \pm 0.409	-0.658	0.510
		Yes	222	8.55 \pm 1.401		
Places at Age 7	All Horses	No	1,981	15.72 \pm 0.519	-0.725	0.469
Years Strike		Yes	188	14.46 \pm 1.490		
Rate	Mares	No	367	14.22 \pm 1.153	0.032	0.974
		Yes	28	14.36 \pm 4.904		
	Geldings	No	1,612	16.04 \pm 0.581	-0.819	0.413
		Yes	160	14.48 \pm 1.534		
Wins at Age 8	All Horses	No	1,386	8.46 \pm 0.496	-1.174	0.241
Years Strike		Yes	119	6.40 \pm 1.568		
Rate	Mares	No	199	7.06 \pm 1.548	-0.436	0.663
		Yes	11	4.17 \pm 3.128		
	Geldings	No	1,185	8.65 \pm 0.518	-1.132	0.258
		Yes	108	6.62 \pm 1.700		
Places at Age 8	All Horses	No	1,386	15.50 \pm 0.573	0.078	0.938
Years Strike		Yes	119	15.66 \pm 2.207		
Rate	Mares	No	199	13.42 \pm 1.436	0.582	0.561
		Yes	11	17.05 \pm 5.102		
	Geldings	No	1,185	15.82 \pm 0.624	-0.138	0.890
		Yes	108	15.52 \pm 2.381		

Appendix 10

Effect of Respiratory Defects on Racing Performance

Table A.13: Proportion of Horses without Respiratory Defects, with an Abnormal Respiratory Noise and or with Laryngeal Paralysis that Raced at Various Ages

Variable	Group	Respiratory Defect	n	%	Chi-Square	Sig.
Raced at Age 7 Years	All Horses	No Respiratory Defect	1,930	52.2	1.080	0.583
		Noise, No RLN	106	50.7		
		RLN	116	48.9		
	Mare	No Respiratory Defect	352	38.3	0.272	0.873
		Noise, No RLN	23	41.8		
		RLN	19	38.8		
	Gelding	No Respiratory Defect	1,576	56.8	2.368	0.306
		Noise, No RLN	83	53.9		
		RLN	97	51.6		
Raced at Age 8 Years	All Horses	No Respiratory Defect	1,342	36.3	1.343	0.511
		Noise, No RLN	72	34.4		
		RLN	78	32.9		
	Mare	No Respiratory Defect	193	21.0	1.473	0.479
		Noise, No RLN	8	14.5		
		RLN	9	18.4		
	Gelding	No Respiratory Defect	1,147	41.4	1.595	0.451
		Noise, No RLN	64	41.6		
		RLN	69	36.7		

Table A.14: Effect of Respiratory Defects on Racing Performance

Means with the same letter are not significantly different from each other

Variable	Group	Respiratory Defect	n	Mean \pm S.E.	Sig.
Mean Number of Starts per Year Raced	All Horses	No Respiratory Defect	3,697	3.49 \pm 0.030	a 0.751
		Noise, No RLN	209	3.51 \pm 0.126	a
		RLN	237	3.40 \pm 0.123	a
	Mares	No Respiratory Defect	919	3.39 \pm 0.063	a 0.390
		Noise, No RLN	55	3.38 \pm 0.267	a
		RLN	49	3.77 \pm 0.252	a
	Geldings	No Respiratory Defect	2,773	3.53 \pm 0.034	a 0.255
		Noise, No RLN	154	3.55 \pm 0.143	a
		RLN	188	3.30 \pm 0.140	a
Mean Number of Chase Starts per Year Raced	All Horses	No Respiratory Defect	3,697	0.75 \pm 0.021	a 0.054
		Noise, No RLN	209	0.68 \pm 0.086	a
		RLN	237	0.56 \pm 0.079	a
	Mares	No Respiratory Defect	919	0.29 \pm 0.027	a 0.174
		Noise, No RLN	55	0.33 \pm 0.129	a
		RLN	49	0.07 \pm 0.039	a
	Geldings	No Respiratory Defect	2,773	0.91 \pm 0.025	a 0.064
		Noise, No RLN	154	0.81 \pm 0.105	a
		RLN	188	0.69 \pm 0.096	a
Starts at Age 6 Years	All Horses	No Respiratory Defect	3,697	2.97 \pm 0.049	a 0.360
		Noise, No RLN	209	2.73 \pm 0.224	a

		RLN	237	2.78 \pm 0.190	a	
	Mares	No Respiratory Defect	919	2.62 \pm 0.098	a	0.944
		Noise, No RLN	55	2.49 \pm 0.429	a	
		RLN	49	2.55 \pm 0.415	a	
	Geldings	No Respiratory Defect	2,773	3.09 \pm 0.057	a	0.325
		Noise, No RLN	154	2.81 \pm 0.264	a	
		RLN	188	2.85 \pm 0.214	a	
Starts at Age 7 Years	All Horses	No Respiratory Defect	3,697	2.23 \pm 0.049	a	0.985
		Noise, No RLN	209	2.19 \pm 0.218	a	
		RLN	237	2.21 \pm 0.206	a	
	Mares	No Respiratory Defect	919	1.55 \pm 0.088	a	0.960
		Noise, No RLN	55	1.65 \pm 0.397	a	
		RLN	49	1.55 \pm 0.385	a	
	Geldings	No Respiratory Defect	2,773	2.45 \pm 0.058	a	0.928
		Noise, No RLN	154	2.38 \pm 0.259	a	
		RLN	188	2.38 \pm 0.238	a	
Starts at Age 8 Years	All Horses	No Respiratory Defect	3,697	1.62 \pm 0.047	a	0.173
		Noise, No RLN	209	1.43 \pm 0.176	a	
		RLN	237	1.31 \pm 0.165	a	
	Mares	No Respiratory Defect	919	0.92 \pm 0.074	a	0.207
		Noise, No RLN	55	0.40 \pm 0.148	a	
		RLN	49	0.71 \pm 0.258	a	
	Geldings	No Respiratory Defect	2,773	1.86 \pm 0.056	a	0.214
		Noise, No RLN	154	1.80 \pm 0.227	a	
		RLN	188	1.47 \pm 0.196	a	
Starts up to Age 8 Years	All Horses	No Respiratory Defect	3,697	9.91 \pm 0.132	a	0.057
		Noise, No RLN	209	9.49 \pm 0.555	a	
		RLN	237	8.66 \pm 0.489	a	
	Mares	No Respiratory Defect	919	8.13 \pm 0.239	a	0.637
		Noise, No RLN	55	8.24 \pm 0.974	a	
		RLN	49	7.14 \pm 0.760	a	
	Geldings	No Respiratory Defect	2,773	10.50 \pm 0.156	a	0.053
		Noise, No RLN	154	9.94 \pm 0.667	a	
		RLN	188	9.06 \pm 0.581	a	
Win Rate	All Horses	No Respiratory Defect	3,697	6.89 \pm 0.193	a	0.167
		Noise, No RLN	209	6.05 \pm 0.739	a	
		RLN	237	5.59 \pm 0.791	a	
	Mares	No Respiratory Defect	919	4.31 \pm 0.321	a	0.215
		Noise, No RLN	55	2.04 \pm 0.965	a	
		RLN	49	3.71 \pm 0.919	a	
	Geldings	No Respiratory Defect	2,773	7.74 \pm 0.232	a	0.196
		Noise, No RLN	154	7.48 \pm 0.917	a	
		RLN	188	6.08 \pm 0.966	a	
Third Place Strike Rate	All Horses	No Respiratory Defect	3,697	6.00 \pm 0.157	a	0.475
		Noise, No RLN	209	5.30 \pm 0.534	a	
		RLN	237	5.56 \pm 0.669	a	
	Mares	No Respiratory Defect	919	5.17 \pm 0.310	a	0.304
		Noise, No RLN	55	3.53 \pm 0.895	a	
		RLN	49	6.28 \pm 1.413	a	

		Geldings	No Respiratory Defect	2,773	6.28 <u>±</u> 0.182	a	0.428
			Noise, No RLN	154	5.93 <u>±</u> 0.644	a	
			RLN	188	5.37 <u>±</u> 0.760	a	
National Hunt Win Strike Rate	All Horses	No Respiratory Defect	3,095	5.85 <u>±</u> 0.186	a	0.145	
		Noise, No RLN	155	4.95 <u>±</u> 0.734	a		
		RLN	163	4.45 <u>±</u> 0.756	a		
	Mares	No Respiratory Defect	721	3.34 <u>±</u> 0.323	a	0.659	
		Noise, No RLN	39	2.10 <u>±</u> 1.273	a		
		RLN	34	2.92 <u>±</u> 1.130	a		
	Geldings	No Respiratory Defect	2,371	6.61 <u>±</u> 0.220	a	0.155	
		Noise, No RLN	116	5.91 <u>±</u> 0.868	a		
		RLN	129	4.85 <u>±</u> 0.906	a		
National Hunt Place Strike Rate	All Horses	No Respiratory Defect	3,095	12.42 <u>±</u> 0.285	a	0.068	
		Noise, No RLN	155	11.19 <u>±</u> 1.059	a		
		RLN	163	9.70 <u>±</u> 1.133	a		
	Mares	No Respiratory Defect	721	9.14 <u>±</u> 0.550	a	0.520	
		Noise, No RLN	39	8.37 <u>±</u> 1.806	a		
		RLN	34	6.32 <u>±</u> 1.608	a		
	Geldings	No Respiratory Defect	2,371	13.41 <u>±</u> 0.329	a	0.111	
		Noise, No RLN	116	12.14 <u>±</u> 1.270	a		
		RLN	129	10.59 <u>±</u> 1.359	a		
Irish Point-to- Point Win Strike Rate	All Horses	No Respiratory Defect	1,657	12.20 <u>±</u> 0.574	a	0.117	
		Noise, No RLN	116	9.55 <u>±</u> 1.706	a		
		RLN	154	8.80 <u>±</u> 1.600	a		
	Mares	No Respiratory Defect	424	9.09 <u>±</u> 0.948	a	0.375	
		Noise, No RLN	28	4.28 <u>±</u> 2.121	a		
		RLN	27	6.95 <u>±</u> 2.186	a		
	Geldings	No Respiratory Defect	1,230	13.26 <u>±</u> 0.697	a	0.156	
		Noise, No RLN	88	11.23 <u>±</u> 2.120	a		
		RLN	127	9.19 <u>±</u> 1.885	a		
Irish Point-to- Point Place Strike Rate	All Horses	No Respiratory Defect	1,657	16.00 <u>±</u> 0.582	a	0.950	
		Noise, No RLN	116	15.36 <u>±</u> 2.089	a		
		RLN	154	15.64 <u>±</u> 2.085	a		
	Mares	No Respiratory Defect	424	12.53 <u>±</u> 0.946	a	0.556	
		Noise, No RLN	28	13.47 <u>±</u> 3.772	a		
		RLN	27	16.73 <u>±</u> 4.672	a		
	Geldings	No Respiratory Defect	1,230	17.21 <u>±</u> 0.710	a	0.687	
		Noise, No RLN	88	15.96 <u>±</u> 2.486	a		
		RLN	127	15.41 <u>±</u> 2.333	a		
Mean Earnings per Race	All Horses	No Respiratory Defect	3,697	453.15 <u>±</u> 19.387	a	0.345	
		Noise, No RLN	209	318.65 <u>±</u> 56.681	a		
		RLN	237	408.17 <u>±</u> 203.019	a		
	Mares	No Respiratory Defect	919	219.69 <u>±</u> 20.534	a	0.694	
		Noise, No RLN	55	191.50 <u>±</u> 92.975	a		
		RLN	49	146.96 <u>±</u> 50.882	a		
	Geldings	No Respiratory Defect	2,773	530.652 <u>±</u> 4.759	a	0.381	
		Noise, No RLN	154	364.066 <u>±</u> 9.185	a		
		RLN	188	476.262 <u>±</u> 55.502	a		
Wins at Age 4	All Horses	No Respiratory Defect	880	7.49 <u>±</u> 0.713	a	0.793	

Years Rate	Strike	Noise, No RLN	45	7.74+2.933	a	
		RLN	37	5.14+2.653	a	
Places at Age 4 Years Strike Rate	Mares	No Respiratory Defect	188	3.36+1.018	a	0.875
		Noise, No RLN	15	2.67+2.667	a	
		RLN	4	0.00+0.000	a	
	Geldings	No Respiratory Defect	691	8.59+0.859	a	0.707
		Noise, No RLN	30	10.28+4.146	a	
		RLN	33	5.76+2.961	a	
	All Horses	No Respiratory Defect	880	14.26+0.915	a	0.359
		Noise, No RLN	45	14.78+4.010	a	
		RLN	37	7.84+3.420	a	
Wins at Age 5 Years Strike Rate	Mares	No Respiratory Defect	188	10.50+1.665	a	0.708
		Noise, No RLN	15	8.22+4.471	a	
		RLN	4	18.75+11.968	a	
	Geldings	No Respiratory Defect	691	15.30+1.071	a	0.177
		Noise, No RLN	30	18.06+5.538	a	
		RLN	33	6.52+3.552	a	
	All Horses	No Respiratory Defect	2,717	8.24+0.378	a	0.224
		Noise, No RLN	151	6.12+1.370	a	
		RLN	153	6.28+1.462	a	
Places at Age 5 Years Strike Rate	Mares	No Respiratory Defect	667	4.59+0.525	a	0.529
		Noise, No RLN	42	2.86+1.512	a	
		RLN	30	6.53+3.594	a	
	Geldings	No Respiratory Defect	2,047	9.43+0.468	a	0.169
		Noise, No RLN	109	7.38+1.796	a	
		RLN	123	6.22+1.601	a	
	All Horses	No Respiratory Defect	2,717	14.21+0.461	a	0.117
		Noise, No RLN	151	13.31+1.795	a	
		RLN	153	10.17+1.656	a	
Wins at Age 6 Years Strike Rate	Mares	No Respiratory Defect	667	9.55+0.717	a	0.985
		Noise, No RLN	42	9.78+2.197	a	
		RLN	30	9.03+2.779	a	
	Geldings	No Respiratory Defect	2,047	15.73+0.562	a	0.074
		Noise, No RLN	109	14.67+2.331	a	
		RLN	123	10.45+1.949	a	
	All Horses	No Respiratory Defect	2,615	8.60+0.354	a	0.951
		Noise, No RLN	138	8.11+1.406	a	
		RLN	161	8.68+1.584	a	
Places at Age 6 Years Strike Rate	Mares	No Respiratory Defect	583	6.00+0.636	a	0.299
		Noise, No RLN	34	1.99+0.848	a	
		RLN	27	5.10+1.641	a	
	Geldings	No Respiratory Defect	2,027	9.67+0.416	a	0.927
		Noise, No RLN	104	10.11+1.804	a	
		RLN	134	9.40+1.870	a	
	All Horses	No Respiratory Defect	2,615	15.44+0.442	a	0.054
		Noise, No RLN	138	14.62+1.872	a	
		RLN	161	11.07+1.592	a	
	Mares	No Respiratory Defect	583	12.71+0.876	a	0.508
		Noise, No RLN	34	11.12+2.771	a	

		RLN	27	8.22 \pm 3.048	a	
	Geldings	No Respiratory Defect	2,027	16.19 \pm 0.509	a	0.083
		Noise, No RLN	104	15.77 \pm 2.309	a	
		RLN	134	11.64 \pm 1.812	a	
Wins at Age 7 Years Strike Rate	All Horses	No Respiratory Defect	1,930	8.63 \pm 0.416	a	0.200
		Noise, No RLN	106	6.92 \pm 1.254	a	
		RLN	116	5.95 \pm 1.370	a	
	Mares	No Respiratory Defect	352	4.73 \pm 0.735	a	0.622
		Noise, No RLN	23	2.01 \pm 1.748	a	
		RLN	19	3.74 \pm 2.681	a	
	Geldings	No Respiratory Defect	1,576	9.47 \pm 0.480	a	0.254
		Noise, No RLN	83	8.28 \pm 1.497	a	
		RLN	97	6.38 \pm 1.554	a	
Wins at Age 8 Years Strike Rate	All Horses	No Respiratory Defect	1,342	8.57 \pm 0.509	a	0.389
		Noise, No RLN	72	6.10 \pm 1.550	a	
		RLN	78	6.70 \pm 2.109	a	
	Mares	No Respiratory Defect	193	7.11 \pm 1.589	a	0.900
		Noise, No RLN	8	4.17 \pm 4.167	a	
		RLN	9	5.09 \pm 3.790	a	
	Geldings	No Respiratory Defect	1,147	8.77 \pm 0.531	a	0.420
		Noise, No RLN	64	6.34 \pm 1.672	a	
		RLN	69	6.91 \pm 2.338	a	
Places at Age 8 Years Strike Rate	All Horses	No Respiratory Defect	1,342	15.39 \pm 0.581	a	0.604
		Noise, No RLN	72	17.66 \pm 2.753	a	
		RLN	78	16.78 \pm 2.810	a	
	Mares	No Respiratory Defect	193	13.71 \pm 1.475	a	0.797
		Noise, No RLN	8	9.17 \pm 6.034	a	
		RLN	9	15.28 \pm 4.501	a	
	Geldings	No Respiratory Defect	1,147	15.65 \pm 0.632	a	0.499
		Noise, No RLN	64	18.72 \pm 2.990	a	
		RLN	69	16.97 \pm 3.130	a	
Wins up to Age 8 Years Strike Rate	All Horses	No Respiratory Defect	3,697	6.10 \pm 0.174	a	0.142
		Noise, No RLN	209	5.15 \pm 0.632	a	
		RLN	237	4.99 \pm 0.726	a	
	Mares	No Respiratory Defect	919	4.14 \pm 0.311	a	0.197
		Noise, No RLN	55	1.92 \pm 0.850	a	
		RLN	49	3.42 \pm 0.892	a	
	Geldings	No Respiratory Defect	2,773	6.75 \pm 0.206	a	0.236
		Noise, No RLN	154	6.30 \pm 0.782	a	
		RLN	188	5.40 \pm 0.883	a	

Appendix 11

Effect of Lameness at the Time of Sale on Racing Performance

Table A.15: Proportion of Horses that were and were not Lamé at the Time of Sale that Raced at Various Ages

Variable	Group	Lame at Sale	n	%	Chi-Square	Sig.
Raced at Age 7 Years	All Horses	No	2,143	51.8	0.104	0.747
		Yes	26	54.2		
	Mare	No	390	38.3	0.237	0.626
		Yes	5	45.5		
	Gelding	No	1,751	56.3	0.003	0.954
		Yes	21	56.8		
Raced at Age 8 Years	All Horses	No	1,491	36.1	0.978	0.323
		Yes	14	29.2		
	Mare	No	208	20.4	0.033	0.855
		Yes	2	18.2		
	Gelding	No	1,281	41.2	1.155	0.282
		Yes	12	32.4		

Table A.16: Effect of Lameness at the Time of Sale on Racing Performance

Variable	Group	Lame at Sale	n	Mean \pm S.E.	t-value	Sig.
Age at First Race	All Horses	No	4,135	5.04 \pm 0.013	1.037	0.300
		Yes	48	5.17 \pm 0.113		
	Mares	No	1,019	5.07 \pm 0.025	1.242	0.214
		Yes	11	5.36 \pm 0.279		
	Geldings	No	3,111	5.04 \pm 0.015	0.528	0.598
		Yes	37	5.11 \pm 0.121		
Mean Number of Starts per Year Raced	All Horses	No	4,135	3.49 \pm 0.028	-0.892	0.373
		Yes	48	3.25 \pm 0.238		
	Mares	No	1,019	3.40 \pm 0.060	-0.411	0.681
		Yes	11	3.16 \pm 0.573		
	Geldings	No	3,111	3.51 \pm 0.032	-0.802	0.423
		Yes	37	3.28 \pm 0.262		
Mean Number of National Hunt Starts per Year Raced	All Horses	No	4,135	2.53 \pm 0.032	-1.335	0.182
		Yes	48	2.14 \pm 0.277		
	Mares	No	1,019	2.28 \pm 0.064	0.649	0.516
		Yes	11	2.68 \pm 0.553		
	Geldings	No	3,111	2.61 \pm 0.036	-1.915	0.056
		Yes	37	1.97 \pm 0.319		
Mean Number of Hurdle Starts per Year Raced	All Horses	No	4,135	1.79 \pm 0.024	-0.934	0.350
		Yes	48	1.58 \pm 0.199		
	Mares	No	1,019	2.01 \pm 0.057	0.763	0.445
		Yes	11	2.43 \pm 0.449		
	Geldings	No	3,111	1.73 \pm 0.026	-1.632	0.103
		Yes	37	1.33 \pm 0.208		
Mean Number of Chase Starts per Year	All Horses	No	4,135	0.74 \pm 0.019	-1.027	0.305
		Yes	48	0.55 \pm 0.147		
	Mares	No	1,019	0.28 \pm 0.025	-0.101	0.919

Raced			Yes	11	0.25 \pm 0.255		
		Geldings	No	3,111	0.89 \pm 0.024	-1.126	0.260
			Yes	37	0.64 \pm 0.175		
Starts Years	Age 4	All Horses	No	4,135	0.58 \pm 0.021	-0.926	0.355
			Yes	48	0.40 \pm 0.157		
		Mares	No	1,019	0.53 \pm 0.043	-0.407	0.684
			Yes	11	0.36 \pm 0.279		
		Geldings	No	3,111	0.59 \pm 0.024	-0.838	0.402
			Yes	37	0.51 \pm 0.188		
		All Horses	No	4,135	2.46 \pm 0.038	-0.771	0.441
			Yes	48	2.19 \pm 0.348		
Starts Years	Age 5	Mares	No	1,019	2.52 \pm 0.080	-1.148	0.251
			Yes	11	1.64 \pm 0.678		
		Geldings	No	3,111	2.44 \pm 0.043	-0.227	0.820
			Yes	37	2.35 \pm 0.405		
Starts Years	Age 6	All Horses	No	4,135	2.95 \pm 0.047	-0.351	0.725
			Yes	48	2.79 \pm 0.367		
		Mares	No	1,019	2.60 \pm 0.093	-0.160	0.873
			Yes	11	2.45 \pm 0.908		
		Geldings	No	3,111	3.06 \pm 0.054	-0.336	0.737
			Yes	37	2.89 \pm 0.399		
Starts Years	Age 7	All Horses	No	4,135	2.22 \pm 0.046	0.166	0.868
			Yes	48	2.29 \pm 0.439		
		Mares	No	1,019	1.54 \pm 0.083	0.565	0.572
			Yes	11	2.00 \pm 1.100		
		Geldings	No	3,111	2.44 \pm 0.055	-0.125	0.900
			Yes	37	2.38 \pm 0.475		
Starts Years	Age 8	All Horses	No	4,135	1.60 \pm 0.044	-1.110	0.267
			Yes	48	1.15 \pm 0.365		
		Mares	No	1,019	0.87 \pm 0.069	-0.221	0.825
			Yes	11	0.73 \pm 0.557		
		Geldings	No	3,111	1.83 \pm 0.053	-1.157	0.247
			Yes	37	1.27 \pm 0.445		
Starts to Years	Age 8	All Horses	No	4,135	9.81 \pm 0.124	-0.857	0.392
			Yes	48	8.81 \pm 1.169		
		Mares	No	1,019	8.07 \pm 0.223	-0.412	0.681
			Yes	11	7.18 \pm 2.789		
		Geldings	No	3,111	10.37 \pm 0.147	-0.796	0.426
			Yes	37	9.30 \pm 1.282		
Win Rate	Strike	All Horses	No	4,135	6.76 \pm 0.182	-0.905	0.366
			Yes	48	5.23 \pm 1.649		
		Mares	No	1,019	4.12 \pm 0.294	0.697	0.501
			Yes	11	7.82 \pm 5.284		
		Geldings	No	3,111	7.62 \pm 0.219	-1.568	0.117
			Yes	37	4.46 \pm 1.492		
Place Rate	Strike	All Horses	No	4,135	13.37 \pm 0.254	0.019	0.985
			Yes	48	13.41 \pm 2.534		
		Mares	No	1,019	10.45 \pm 0.475	0.911	0.362
			No				

		Yes	11	14.65 \pm 5.727		
	Geldings	No	3,111	14.31 \pm 0.297	-0.464	0.643
		Yes	37	13.04 \pm 2.854		
Second Place Strike Rate	All Horses	No	4,135	6.31 \pm 0.159	-0.326	0.744
		Yes	48	5.82 \pm 1.182		
	Mares	No	1,019	5.09 \pm 0.334	-0.141	0.888
		Yes	11	4.64 \pm 2.585		
	Geldings	No	3,111	6.71 \pm 0.181	-0.320	0.749
		Yes	37	6.17 \pm 1.342		
Third Place Strike Rate	All Horses	No	4,135	5.94 \pm 0.148	0.041	0.967
		Yes	48	6.00 \pm 1.386		
	Mares	No	1,019	5.07 \pm 0.288	1.069	0.310
		Yes	11	10.01 \pm 4.614		
	Geldings	No	3,111	6.22 \pm 0.172	-0.896	0.370
		Yes	37	4.80 \pm 1.149		
Overall Strike Rate	All Horses	No	4,135	20.13 \pm 0.342	-0.466	0.641
		Yes	48	18.64 \pm 3.383		
	Mares	No	1,019	14.58 \pm 0.606	0.934	0.372
		Yes	11	22.47 \pm 8.425		
	Geldings	No	3,111	21.94 \pm 0.403	-1.193	0.233
		Yes	37	17.50 \pm 3.656		
National Hunt Win Strike Rate	All Horses	No	3,403	5.72 \pm 0.175	0.169	0.866
		Yes	37	6.01 \pm 2.155		
	Mares	No	788	3.24 \pm 0.300	0.495	0.631
		Yes	11	5.80 \pm 5.169		
	Geldings	No	2,612	6.47 \pm 0.207	-0.177	0.860
		Yes	26	6.10 \pm 2.235		
National Hunt Place Strike Rate	All Horses	No	3,403	12.26 \pm 0.269	-0.179	0.858
		Yes	37	11.79 \pm 2.457		
	Mares	No	788	8.99 \pm 0.514	0.526	0.599
		Yes	11	11.30 \pm 5.327		
	Geldings	No	2,612	13.24 \pm 0.312	-0.393	0.694
		Yes	26	12.00 \pm 2.751		
Irish Point-to-Point Place Strike Rate	All Horses	No	1,929	15.73 \pm 0.538	1.265	0.206
		Yes	26	21.66 \pm 5.761		
	Mares	No	480	12.66 \pm 0.898	1.602	0.110
		Yes	3	30.95 \pm 15.613		
	Geldings	No	1,446	16.76 \pm 0.651	0.706	0.480
		Yes	23	20.44 \pm 6.258		
Mean Earnings per Race	All Horses	No	4,135	441.07 \pm 20.898	0.854	0.393
		Yes	48	608.47 \pm 265.283		
	Mares	No	1,019	212.83 \pm 18.714	0.854	0.413
		Yes	11	768.79 \pm 650.810		
	Geldings	No	3,111	515.93 \pm 26.957	0.180	0.857
		Yes	37	560.80 \pm 289.724		
Wins at Age 4 Years Strike Rate	All Horses	No	961	7.40 \pm 0.672	0.267	0.790
		Yes	9	9.26 \pm 7.407		
	Mares	No	208	3.03 \pm 0.894	0.909	0.530

		Yes	2	33.33 \pm 33.333		
	Geldings	No	752	8.58 \pm 0.817	-0.731	0.465
		Yes	7	2.38 \pm 2.381		
Places at Age 4 Years Strike Rate	All Horses	No	961	14.10 \pm 0.871	-0.742	0.458
		Yes	9	7.41 \pm 4.900		
	Mares	No	208	10.53 \pm 1.560	0.384	0.701
		Yes	2	16.67 \pm 16.667		
	Geldings	No	752	15.11 \pm 1.024	-0.974	0.331
		Yes	7	4.76 \pm 4.762		
Wins at Age 5 Years Strike Rate	All Horses	No	3,017	8.01 \pm 0.354	-0.566	0.571
		Yes	33	6.09 \pm 2.891		
	Mares	No	738	4.53 \pm 0.501	1.104	0.270
		Yes	6	10.71 \pm 8.196		
	Geldings	No	2,276	9.14 \pm 0.438	-1.012	0.312
		Yes	27	5.06 \pm 3.078		
Places at Age 5 Years Strike Rate	All Horses	No	3,017	13.93 \pm 0.433	-0.985	0.324
		Yes	33	9.83 \pm 3.104		
	Mares	No	738	9.57 \pm 0.668	-0.167	0.868
		Yes	6	8.33 \pm 8.333		
	Geldings	No	2,276	15.34 \pm 0.528	-1.065	0.287
		Yes	27	10.17 \pm 3.392		
Wins at Age 6 Years Strike Rate	All Horses	No	2,907	8.56 \pm 0.336	-0.580	0.562
		Yes	34	6.76 \pm 2.566		
	Mares	No	641	5.77 \pm 0.585	0.040	0.968
		Yes	6	6.02 \pm 4.208		
	Geldings	No	2,261	9.37 \pm 0.397	-0.686	0.493
		Yes	28	6.91 \pm 3.010		
Places at Age 6 Years Strike Rate	All Horses	No	2,907	15.14 \pm 0.417	0.587	0.557
		Yes	34	17.41 \pm 3.682		
	Mares	No	641	12.42 \pm 0.820	0.715	0.475
		Yes	6	18.52 \pm 10.109		
	Geldings	No	2,261	15.87 \pm 0.480	0.301	0.764
		Yes	28	17.17 \pm 4.006		
Wins at Age 7 Years Strike Rate	All Horses	No	2,143	8.44 \pm 0.388	-1.065	0.287
		Yes	26	4.68 \pm 2.014		
	Mares	No	390	4.55 \pm 0.683	-0.452	0.652
		Yes	5	1.82 \pm 1.818		
	Geldings	No	1,751	9.28 \pm 0.447	-0.957	0.339
		Yes	21	5.36 \pm 2.449		
Places at Age 7 Years Strike Rate	All Horses	No	2,143	15.62 \pm 0.500	-0.134	0.893
		Yes	26	15.02 \pm 3.749		
	Mares	No	390	14.24 \pm 1.135	-0.125	0.901
		Yes	5	12.99 \pm 8.048		
	Geldings	No	1,751	15.90 \pm 0.550	-0.079	0.937
		Yes	21	15.50 \pm 4.314		
Wins at Age 8 Years Strike Rate	All Horses	No	1,491	8.29 \pm 0.476	-0.016	0.987
		Yes	14	8.21 \pm 4.558		
	Mares	No	208	6.98 \pm 1.489	-0.458	0.647

		Yes	2	0.00 \pm 0.000		
	Geldings	No	1,281	8.47 \pm 0.498	0.216	0.829
		Yes	12	9.58 \pm 5.239		
Places at Age 8 Years Strike Rate	All Horses	No	1,491	15.50 \pm 0.556	0.302	0.763
		Yes	14	17.24 \pm 7.576		
	Mares	No	208	13.50 \pm 1.386	0.805	0.421
		Yes	2	25.00 \pm 25.000		
	Geldings	No	1,281	15.80 \pm 0.607	0.025	0.980
		Yes	12	15.95 \pm 8.283		
Wins up to 8 Strike Rate	All Horses	No	4,135	5.98 \pm 0.163	-0.672	0.502
		Yes	48	4.96 \pm 1.590		
	Mares	No	1,019	3.95 \pm 0.283	0.735	0.479
		Yes	11	7.84 \pm 5.285		
	Geldings	No	3,111	6.65 \pm 0.195	-1.421	0.155
		Yes	37	4.10 \pm 1.373		
Places up to 8 Strike Rate	All Horses	No	4,135	12.17 \pm 0.242	0.151	0.880
		Yes	48	12.51 \pm 2.408		
	Mares	No	1,019	10.03 \pm 0.464	1.041	0.298
		Yes	11	14.71 \pm 5.738		
	Geldings	No	3,111	12.87 \pm 0.282	-0.389	0.697
		Yes	37	11.86 \pm 2.655		
Wins up to 8	All Horses	No	4,135	0.90 \pm 0.024	-0.931	0.352
		Yes	48	0.69 \pm 0.213		
	Mares	No	1,019	0.48 \pm 0.033	0.763	0.445
		Yes	11	0.73 \pm 0.428		
	Geldings	No	3,111	1.03 \pm 0.030	-1.288	0.198
		Yes	37	0.68 \pm 0.248		
Places up to 8	All Horses	No	4,135	1.73 \pm 0.038	-0.655	0.513
		Yes	48	1.50 \pm 0.300		
	Mares	No	1,019	1.18 \pm 0.061	0.305	0.761
		Yes	11	1.36 \pm 0.730		
	Geldings	No	3,111	1.91 \pm 0.046	-0.875	0.382
		Yes	37	1.54 \pm 0.330		

Appendix 12

Effect of Metacarpal/Metatarsal Exostoses on Racing Performance

Table A.17: Effect of Metacarpal/Metatarsal Exostoses on Type of Racing Career

Group	Metacarpal/ Metatarsal Exostoses	NH Only	P2P Only	NH & P2P	Chi-Square	Sig.
All Horses	No Metacarpal/ Metatarsal Exostoses	1,811 53.2%	598 17.6%	994 29.2%	4.310	0.366
	Unilateral Metacarpal/ Metatarsal Exostoses	309 55.4%	98 17.6%	151 27.1%		
	Multilateral	111	38	78		
	Metacarpal/ Metatarsal Exostoses	48.9%	16.7%	34.4%		
Mare	No Metacarpal/ Metatarsal Exostoses	450 53.3%	192 22.7%	203 24.0%	3.110	0.540
	Unilateral Metacarpal/ Metatarsal Exostoses	68 53.5%	25 19.7%	34 26.8%		
	Multilateral	27	11	19		
	Metacarpal/ Metatarsal Exostoses	47.4%	19.3%	33.3%		
Gelding	No Metacarpal/ Metatarsal Exostoses	1,359 53.2%	404 15.8%	790 30.9%	4.030	0.402
	Unilateral Metacarpal/ Metatarsal Exostoses	241 55.9%	73 16.9%	117 27.1%		
	Multilateral	84	27	59		
	Metacarpal/ Metatarsal Exostoses	49.4%	15.9%	34.7%		

Table A.18: Proportion of Horses without Metacarpal/Metatarsal Exostoses , with Unilateral Metacarpal/Metatarsal Exostoses and with Multilateral Metacarpal/Metatarsal Exostoses that Raced at Various Ages

Variable	Group	Metacarpal/ Metatarsal Exostoses	n	%	Chi-Square	Sig.
Raced at Age 7 Years	All Horses	No Metacarpal/ Metatarsal Exostoses	1,749	51.5	1.571	0.456
		Unilateral		54.3		
		Metacarpal/ Metatarsal Exostoses	301			
		Multiple Metacarpal/ Metatarsal Exostoses	117	51.5		
	Mare	No Metacarpal/ Metatarsal Exostoses	316	37.4	4.143	0.126
		Unilateral		46.5		
		Metacarpal/ Metatarsal Exostoses	59			
		Multiple Metacarpal/ Metatarsal Exostoses	20	35.1		
	Gelding	No Metacarpal/ Metatarsal Exostoses	1,431	56.2	0.078	0.962

			Unilateral Metacarpal/ Metatarsal Exostoses	242	56.7		
			Multiple Metacarpal/ Metatarsal Exostoses	97	57.1		
Raced Age Years	at 8	All Horses	No Metacarpal/ Metatarsal Exostoses	1,226	36.1	2.655	0.265
			Unilateral Metacarpal/ Metatarsal Exostoses	207	37.4		
			Multiple Metacarpal/ Metatarsal Exostoses	71	31.3		
		Mare	No Metacarpal/ Metatarsal Exostoses	176	20.8	1.508	0.470
			Unilateral Metacarpal/ Metatarsal Exostoses	26	20.5		
			Multiple Metacarpal/ Metatarsal Exostoses	8	14.0		
		Gelding	No Metacarpal/ Metatarsal Exostoses	1,048	41.1	1.442	0.486
			Unilateral Metacarpal/ Metatarsal Exostoses	181	42.4		
			Multiple Metacarpal/ Metatarsal Exostoses	63	37.1		

Table A.19: Effect of Metacarpal/Metatarsal Exostoses on Racing Performance

Means with the same letter are not significantly different from each other

Variable	Group	Metacarpal/Metatarsal Exostoses	n	Mean \pm S.E.	Sig.
Age at First Race	All Horses	No Metacarpal/ Metatarsal Exostoses	3,398	5.04 \pm 0.014	a 0.710
		Unilateral Metacarpal/ Metatarsal Exostoses	554	5.06 \pm 0.035	a
		Multiple Metacarpal/ Metatarsal Exostoses	227	5.08 \pm 0.042	a
	Mares	No Metacarpal/ Metatarsal Exostoses	846	5.07 \pm 0.027	a 0.867
		Unilateral Metacarpal/ Metatarsal Exostoses	127	5.07 \pm 0.074	a
		Multiple Metacarpal/ Metatarsal Exostoses	57	5.12 \pm 0.079	a
	Geldings	No Metacarpal/ Metatarsal Exostoses	2,547	5.03 \pm 0.017	a 0.770
		Unilateral Metacarpal/ Metatarsal Exostoses	427	5.06 \pm 0.039	a

		Metatarsal Exostoses Multiple Metacarpal/ Metatarsal Exostoses	170	5.06±0.050	a	
Mean Number of Starts per Year Raced	All Horses	No Metacarpal/ Metatarsal Exostoses	3,398	3.49±0.031	a	0.623
		Unilateral Metacarpal/ Metatarsal Exostoses	554	3.42±0.077	a	
		Multiple Metacarpal/ Metatarsal Exostoses	227	3.56±0.118	a	
	Mares	No Metacarpal/ Metatarsal Exostoses	846	3.39±0.065	a	0.618
		Unilateral Metacarpal/ Metatarsal Exostoses	127	3.33±0.169	a	
		Multiple Metacarpal/ Metatarsal Exostoses	57	3.62±0.251	a	
	Geldings	No Metacarpal/ Metatarsal Exostoses	2,547	3.52±0.036	a	0.781
		Unilateral Metacarpal/ Metatarsal Exostoses	427	3.45±0.087	a	
		Multiple Metacarpal/ Metatarsal Exostoses	170	3.53±0.134	a	
Mean Number of National Hunt Starts per Year Raced	All Horses	No Metacarpal/ Metatarsal Exostoses	3,398	2.53±0.035	a	0.985
		Unilateral Metacarpal/ Metatarsal Exostoses	554	2.51±0.085	a	
		Multiple Metacarpal/ Metatarsal Exostoses	227	2.52±0.129	a	
	Mares	No Metacarpal/ Metatarsal Exostoses	846	2.29±0.071	a	0.615
		Unilateral Metacarpal/ Metatarsal Exostoses	127	2.35±0.179	a	
		Multiple Metacarpal/ Metatarsal Exostoses	57	2.03±0.248	a	
	Geldings	No Metacarpal/ Metatarsal Exostoses	2,547	2.61±0.040	a	0.779
		Unilateral Metacarpal/ Metatarsal Exostoses	427	2.56±0.096	a	
		Multiple Metacarpal/ Metatarsal Exostoses	170	2.69±0.149	a	
Mean Number of Hurdle Starts per Year Raced	All Horses	No Metacarpal/ Metatarsal Exostoses	3,398	1.80±0.027	a	0.299
		Unilateral Metacarpal/ Metatarsal Exostoses	554	1.70±0.063	a	

		Metatarsal Exostoses Multiple Metacarpal/ Metatarsal Exostoses	227	1.86±0.103	a	
	Mares	No Metacarpal/ Metatarsal Exostoses	846	2.03±0.063	a	0.588
		Unilateral Metacarpal/ Metatarsal Exostoses	127	2.02±0.153	a	
		Multiple Metacarpal/ Metatarsal Exostoses	57	1.77±0.222	a	
	Geldings	No Metacarpal/ Metatarsal Exostoses	2,547	1.73±0.029	a	0.086
		Unilateral Metacarpal/ Metatarsal Exostoses	427	1.61±0.067	a	
		Multiple Metacarpal/ Metatarsal Exostoses	170	1.89±0.116	a	
Mean Number of Chase Starts per Year Raced	All Horses	No Metacarpal/ Metatarsal Exostoses	3,398	0.73±0.021	a	0.293
		Unilateral Metacarpal/ Metatarsal Exostoses	554	0.80±0.057	a	
		Multiple Metacarpal/ Metatarsal Exostoses	227	0.67±0.072	a	
	Mares	No Metacarpal/ Metatarsal Exostoses	846	0.28±0.027	a	0.936
		Unilateral Metacarpal/ Metatarsal Exostoses	127	0.30±0.091	a	
		Multiple Metacarpal/ Metatarsal Exostoses	57	0.26±0.091	a	
	Geldings	No Metacarpal/ Metatarsal Exostoses	2,547	0.88±0.026	a	0.393
		Unilateral Metacarpal/ Metatarsal Exostoses	427	0.95±0.068	a	
		Multiple Metacarpal/ Metatarsal Exostoses	170	0.80±0.088	a	
	All Horses	No Metacarpal/ Metatarsal Exostoses	3,398	0.91±0.024	a	0.555
		Unilateral Metacarpal/ Metatarsal Exostoses	554	0.88±0.058	a	
		Multiple Metacarpal/ Metatarsal Exostoses	227	0.99±0.095	a	
	Mares	No Metacarpal/ Metatarsal Exostoses	846	1.06±0.054	a	0.095
		Unilateral Metacarpal/ Metatarsal Exostoses	127	0.96±0.132	a	

			Multiple Metacarpal/ Metatarsal Exostoses	57	1.49 \pm 0.244	a	
			Geldings No Metacarpal/ Metatarsal Exostoses	2,547	0.86 \pm 0.026	a	0.936
			Unilateral Metacarpal/ Metatarsal Exostoses	427	0.85 \pm 0.064	a	
			Multiple Metacarpal/ Metatarsal Exostoses	170	0.83 \pm 0.094	a	
Starts at Age 4 Years	All Horses		No Metacarpal/ Metatarsal Exostoses	3,398	0.59 \pm 0.023	a	0.062
			Unilateral Metacarpal/ Metatarsal Exostoses	554	0.55 \pm 0.055	a	
			Multiple Metacarpal/ Metatarsal Exostoses	227	0.38 \pm 0.084	a	
	Mares		No Metacarpal/ Metatarsal Exostoses	846	0.55 \pm 0.048	a	0.085
			Unilateral Metacarpal/ Metatarsal Exostoses	127	0.54 \pm 0.116	a	
			Multiple Metacarpal/ Metatarsal Exostoses	57	0.14 \pm 0.077	a	
	Geldings		No Metacarpal/ Metatarsal Exostoses	2,547	0.60 \pm 0.026	a	0.321
			Unilateral Metacarpal/ Metatarsal Exostoses	427	0.55 \pm 0.062	a	
			Multiple Metacarpal/ Metatarsal Exostoses	170	0.46 \pm 0.109	a	
Starts at Age 5 Years	All Horses		No Metacarpal/ Metatarsal Exostoses	3,398	2.46 \pm 0.042	a	0.920
			Unilateral Metacarpal/ Metatarsal Exostoses	554	2.43 \pm 0.107	a	
			Multiple Metacarpal/ Metatarsal Exostoses	227	2.42 \pm 0.143	a	
	Mares		No Metacarpal/ Metatarsal Exostoses	846	2.52 \pm 0.088	a	0.768
			Unilateral Metacarpal/ Metatarsal Exostoses	127	2.38 \pm 0.231	a	
			Multiple Metacarpal/ Metatarsal Exostoses	57	2.65 \pm 0.294	a	
	Geldings		No Metacarpal/ Metatarsal Exostoses	2,547	2.44 \pm 0.048	a	0.865
			Unilateral Metacarpal/ Metatarsal Exostoses	427	2.44 \pm 0.120	a	

			Multiple Metacarpal/ Metatarsal Exostoses	170	2.34±0.164	a	
Starts at Age 6 Years	All Horses	No Metacarpal/ Metatarsal Exostoses	3,398	2.90±0.051	a	0.102	
		Unilateral Metacarpal/ Metatarsal Exostoses	554	3.04±0.134	a		
		Multiple Metacarpal/ Metatarsal Exostoses	227	3.30±0.213	a		
	Mares	No Metacarpal/ Metatarsal Exostoses	846	2.59±0.101	a	0.827	
		Unilateral Metacarpal/ Metatarsal Exostoses	127	2.54±0.290	a		
		Multiple Metacarpal/ Metatarsal Exostoses	57	2.82±0.381	a		
	Geldings	No Metacarpal/ Metatarsal Exostoses	2,547	3.00±0.059	a	0.093	
		Unilateral Metacarpal/ Metatarsal Exostoses	427	3.18±0.150	a		
		Multiple Metacarpal/ Metatarsal Exostoses	170	3.46±0.253	a		
Starts at Age 7 Years	All Horses	No Metacarpal/ Metatarsal Exostoses	3,398	2.23±0.051	a	0.931	
		Unilateral Metacarpal/ Metatarsal Exostoses	554	2.18±0.121	a		
		Multiple Metacarpal/ Metatarsal Exostoses	227	2.25±0.204	a		
	Mares	No Metacarpal/ Metatarsal Exostoses	846	1.52±0.091	a	0.778	
		Unilateral Metacarpal/ Metatarsal Exostoses	127	1.69±0.220	a		
		Multiple Metacarpal/ Metatarsal Exostoses	57	1.65±0.420	a		
	Geldings	No Metacarpal/ Metatarsal Exostoses	2,547	2.46±0.061	a	0.693	
		Unilateral Metacarpal/ Metatarsal Exostoses	427	2.32±0.143	a		
		Multiple Metacarpal/ Metatarsal Exostoses	170	2.45±0.233	a		
Starts at Age 8 Years	All Horses	No Metacarpal/ Metatarsal Exostoses	3,398	1.60±0.048	a	0.903	
		Unilateral Metacarpal/ Metatarsal Exostoses	554	1.57±0.116	a		

		Multiple Metacarpal/ Metatarsal Exostoses	227	1.53±0.193	a	
	Mares	No Metacarpal/ Metatarsal Exostoses	846	0.87±0.074	a	0.953
		Unilateral Metacarpal/ Metatarsal Exostoses	127	0.91±0.204	a	
		Multiple Metacarpal/ Metatarsal Exostoses	57	0.81±0.302	a	
	Geldings	No Metacarpal/ Metatarsal Exostoses	2,547	1.84±0.059	a	0.839
		Unilateral Metacarpal/ Metatarsal Exostoses	427	1.76±0.136	a	
		Multiple Metacarpal/ Metatarsal Exostoses	170	1.77±0.234	a	
Starts up to Age 8 Years	All Horses	No Metacarpal/ Metatarsal Exostoses	3,398	9.79±0.136	a	0.983
		Unilateral Metacarpal/ Metatarsal Exostoses	554	9.76±0.348	a	
		Multiple Metacarpal/ Metatarsal Exostoses	227	9.88±0.543	a	
	Mares	No Metacarpal/ Metatarsal Exostoses	846	8.06±0.243	a	1.000
		Unilateral Metacarpal/ Metatarsal Exostoses	127	8.07±0.687	a	
		Multiple Metacarpal/ Metatarsal Exostoses	57	8.07±0.950	a	
	Geldings	No Metacarpal/ Metatarsal Exostoses	2,547	10.36±0.161	a	0.954
		Unilateral Metacarpal/ Metatarsal Exostoses	427	10.26±0.400	a	
		Multiple Metacarpal/ Metatarsal Exostoses	170	10.48±0.646	a	
Mean Proportion of Non-Finished Races per Start	All Horses	No Metacarpal/ Metatarsal Exostoses	3,398	26.20±0.487	a	0.527
		Unilateral Metacarpal/ Metatarsal Exostoses	554	27.26±1.247	a	
		Multiple Metacarpal/ Metatarsal Exostoses	227	24.83±1.821	a	
	Mares	No Metacarpal/ Metatarsal Exostoses	846	27.64±1.104	a	0.312
		Unilateral Metacarpal/ Metatarsal Exostoses	127	29.64±3.001	a	
		Multiple Metacarpal/ Metatarsal Exostoses	57	21.91±3.166	a	

			Metatarsal Exostoses				
Win Rate	Strike	All Horses	Geldings	No Metacarpal/ Metatarsal Exostoses	2,547	25.72±0.536	a 0.842
				Unilateral Metacarpal/ Metatarsal Exostoses	427	26.56±1.350	a
				Multiple Metacarpal/ Metatarsal Exostoses	170	25.80±2.187	a
		Mares		No Metacarpal/ Metatarsal Exostoses	3,398	6.72±0.201	a 0.220
				Unilateral Metacarpal/ Metatarsal Exostoses	554	7.32±0.512	a
				Multiple Metacarpal/ Metatarsal Exostoses	227	5.74±0.663	a
		Geldings		No Metacarpal/ Metatarsal Exostoses	846	4.10±0.331	a 0.885
				Unilateral Metacarpal/ Metatarsal Exostoses	127	4.54±0.770	a
				Multiple Metacarpal/ Metatarsal Exostoses	57	4.28±1.221	a
Place Rate	Strike	All Horses		No Metacarpal/ Metatarsal Exostoses	2,547	7.58±0.242	a 0.224
				Unilateral Metacarpal/ Metatarsal Exostoses	427	8.15±0.618	a
				Multiple Metacarpal/ Metatarsal Exostoses	170	6.23±0.784	a
		Mares		No Metacarpal/ Metatarsal Exostoses	3,398	13.42±0.283	a 0.882
				Unilateral Metacarpal/ Metatarsal Exostoses	554	13.04±0.647	a
				Multiple Metacarpal/ Metatarsal Exostoses	227	13.38±1.063	a
		Geldings		No Metacarpal/ Metatarsal Exostoses	846	10.25±0.520	a 0.524
				Unilateral Metacarpal/ Metatarsal Exostoses	127	11.68±1.400	a
				Multiple Metacarpal/ Metatarsal Exostoses	57	11.58±2.005	a
		Geldings		No Metacarpal/ Metatarsal Exostoses	2,547	14.46±0.334	a 0.488
				Unilateral Metacarpal/ Metatarsal Exostoses	427	13.45±0.729	a
				Multiple Metacarpal/ Metatarsal Exostoses	170	13.99±1.250	a

			Metatarsal Exostoses				
Second Place Strike Rate	All Horses	No Metacarpal/ Metatarsal Exostoses	3,398	6.36 \pm 0.178	a	0.697	
		Unilateral Metacarpal/ Metatarsal Exostoses	554	6.03 \pm 0.388	a		
		Multiple Metacarpal/ Metatarsal Exostoses	227	5.99 \pm 0.705	a		
	Mares	No Metacarpal/ Metatarsal Exostoses	846	4.92 \pm 0.371	a	0.429	
		Unilateral Metacarpal/ Metatarsal Exostoses	127	6.23 \pm 0.893	a		
		Multiple Metacarpal/ Metatarsal Exostoses	57	5.11 \pm 1.207	a		
	Geldings	No Metacarpal/ Metatarsal Exostoses	2,547	6.84 \pm 0.202	a	0.215	
		Unilateral Metacarpal/ Metatarsal Exostoses	427	5.97 \pm 0.429	a		
		Multiple Metacarpal/ Metatarsal Exostoses	170	6.28 \pm 0.851	a		
Third Place Strike Rate	All Horses	No Metacarpal/ Metatarsal Exostoses	3,398	5.95 \pm 0.166	a	0.958	
		Unilateral Metacarpal/ Metatarsal Exostoses	554	5.84 \pm 0.373	a		
		Multiple Metacarpal/ Metatarsal Exostoses	227	6.02 \pm 0.573	a		
	Mares	No Metacarpal/ Metatarsal Exostoses	846	5.09 \pm 0.320	a	0.863	
		Unilateral Metacarpal/ Metatarsal Exostoses	127	5.49 \pm 0.846	a		
		Multiple Metacarpal/ Metatarsal Exostoses	57	4.77 \pm 1.141	a		
	Geldings	No Metacarpal/ Metatarsal Exostoses	2,547	6.24 \pm 0.194	a	0.798	
		Unilateral Metacarpal/ Metatarsal Exostoses	427	5.94 \pm 0.414	a		
		Multiple Metacarpal/ Metatarsal Exostoses	170	6.44 \pm 0.661	a		
Overall Strike Rate	All Horses	No Metacarpal/ Metatarsal Exostoses	3,398	20.14 \pm 0.380	a	0.766	
		Unilateral Metacarpal/ Metatarsal Exostoses	554	20.36 \pm 0.919	a		
		Multiple Metacarpal/ Metatarsal Exostoses	227	19.12 \pm 1.389	a		

		Metatarsal Exostoses					
National Hunt Win Strike Rate	Mares	No Metacarpal/ Metatarsal Exostoses	846	14.34 \pm 0.664	a	0.534	
		Unilateral Metacarpal/ Metatarsal Exostoses	127	16.22 \pm 1.867	a		
		Multiple Metacarpal/ Metatarsal Exostoses	57	15.86 \pm 2.356	a		
	Geldings	No Metacarpal/ Metatarsal Exostoses	2,547	22.05 \pm 0.449	a	0.567	
		Unilateral Metacarpal/ Metatarsal Exostoses	427	21.60 \pm 1.048	a		
		Multiple Metacarpal/ Metatarsal Exostoses	170	20.22 \pm 1.674	a		
	All Horses	No Metacarpal/ Metatarsal Exostoses	2,792	5.68 \pm 0.193	a	0.171	
		Unilateral Metacarpal/ Metatarsal Exostoses	456	6.42 \pm 0.509	a		
		Multiple Metacarpal/ Metatarsal Exostoses	189	4.85 \pm 0.671	a		
	Mares	No Metacarpal/ Metatarsal Exostoses	651	3.14 \pm 0.333	a	0.319	
		Unilateral Metacarpal/ Metatarsal Exostoses	102	4.44 \pm 0.893	a		
		Multiple Metacarpal/ Metatarsal Exostoses	46	2.66 \pm 1.272	a		
	Geldings	No Metacarpal/ Metatarsal Exostoses	2,138	6.44 \pm 0.229	a	0.379	
		Unilateral Metacarpal/ Metatarsal Exostoses	354	6.99 \pm 0.600	a		
		Multiple Metacarpal/ Metatarsal Exostoses	143	5.55 \pm 0.780	a		
Irish Point-to- Point Win Strike Rate	All Horses	No Metacarpal/ Metatarsal Exostoses	1,588	11.92 \pm 0.574	a	0.374	
		Unilateral Metacarpal/ Metatarsal Exostoses	249	11.29 \pm 1.506	a		
		Multiple Metacarpal/ Metatarsal Exostoses	116	8.92 \pm 1.651	a		
	Mares	No Metacarpal/ Metatarsal Exostoses	394	8.73 \pm 0.920	a	0.975	
		Unilateral Metacarpal/ Metatarsal Exostoses	59	8.15 \pm 2.773	a		
		Multiple Metacarpal/ Metatarsal Exostoses	30	8.52 \pm 3.619	a		

	Geldings	No Metacarpal/ Metatarsal Exostoses	1,191	12.96 \pm 0.699	a	0.330
		Unilateral	190	12.26 \pm 1.773	a	
		Metacarpal/ Metatarsal Exostoses				
		Multiple Metacarpal/ Metatarsal Exostoses	86	9.05 \pm 1.849	a	
Irish Point-to- Point Place Strike Rate	All Horses	No Metacarpal/ Metatarsal Exostoses	1,588	15.96 \pm 0.591	a	0.102
		Unilateral	249	13.47 \pm 1.468	a	
		Metacarpal/ Metatarsal Exostoses				
		Multiple Metacarpal/ Metatarsal Exostoses	116	18.99 \pm 2.515	a	
	Mares	No Metacarpal/ Metatarsal Exostoses	394	12.84 \pm 0.976	a	0.274
		Unilateral	59	10.09 \pm 2.555	a	
		Metacarpal/ Metatarsal Exostoses				
		Multiple Metacarpal/ Metatarsal Exostoses	30	17.19 \pm 4.414	a	
	Geldings	No Metacarpal/ Metatarsal Exostoses	1,191	17.00 \pm 0.715	a	0.249
		Unilateral	190	14.52 \pm 1.749	a	
		Metacarpal/ Metatarsal Exostoses				
		Multiple Metacarpal/ Metatarsal Exostoses	86	19.62 \pm 3.034	a	
Wins at Age 4 Years Strike Rate	All Horses	No Metacarpal/ Metatarsal Exostoses	810	7.39 \pm 0.717	a	0.636
		Unilateral	125	8.40 \pm 2.171	a	
		Metacarpal/ Metatarsal Exostoses				
		Multiple Metacarpal/ Metatarsal Exostoses	34	4.59 \pm 3.043	a	
	Mares	No Metacarpal/ Metatarsal Exostoses	176	2.82 \pm 0.793	a	0.280
		Unilateral	29	6.90 \pm 4.789	a	
		Metacarpal/ Metatarsal Exostoses				
		Multiple Metacarpal/ Metatarsal Exostoses	5	0.00 \pm 0.000	a	
	Geldings	No Metacarpal/ Metatarsal Exostoses	633	8.63 \pm 0.884	a	0.737
		Unilateral	96	8.86 \pm 2.442	a	
		Metacarpal/ Metatarsal Exostoses				
		Multiple Metacarpal/ Metatarsal Exostoses	29	5.38 \pm 3.556	a	
Places at Age	All Horses	No Metacarpal/ Metatarsal Exostoses	810	14.19 \pm 0.949	a	0.419

4 Years Strike Rate	Metatarsal Exostoses					
	Unilateral Metacarpal/ Metatarsal Exostoses		125	14.77±2.500	a	
	Multiple Metacarpal/ Metatarsal Exostoses		34	8.16±3.484	a	
	Mares	No Metacarpal/ Metatarsal Exostoses	176	11.13±1.768	a	0.514
		Unilateral Metacarpal/ Metatarsal Exostoses	29	9.10±3.228	a	
		Multiple Metacarpal/ Metatarsal Exostoses	5	0.00±0.000	a	
	Geldings	No Metacarpal/ Metatarsal Exostoses	633	15.06±1.109	a	0.505
		Unilateral Metacarpal/ Metatarsal Exostoses	96	16.49±3.089	a	
		Multiple Metacarpal/ Metatarsal Exostoses	29	9.56±4.037	a	
Wins at Age 6 Years Strike Rate	All Horses	No Metacarpal/ Metatarsal Exostoses	2,379	8.51±0.374	a	0.321
		Unilateral Metacarpal/ Metatarsal Exostoses	393	9.27±0.899	a	
		Multiple Metacarpal/ Metatarsal Exostoses	165	6.75±1.127	a	
	Mares	No Metacarpal/ Metatarsal Exostoses	537	5.85±0.666	a	0.840
		Unilateral Metacarpal/ Metatarsal Exostoses	74	5.95±1.384	a	
		Multiple Metacarpal/ Metatarsal Exostoses	36	4.37±1.588	a	
	Geldings	No Metacarpal/ Metatarsal Exostoses	1,837	9.32±0.442	a	0.408
		Unilateral Metacarpal/ Metatarsal Exostoses	319	10.04±1.056	a	
		Multiple Metacarpal/ Metatarsal Exostoses	129	7.42±1.368	a	
Places at Age 6 Years Strike Rate	All Horses	No Metacarpal/ Metatarsal Exostoses	2,379	15.35±0.464	a	0.593
		Unilateral Metacarpal/ Metatarsal Exostoses	393	14.12±1.065	a	
		Multiple Metacarpal/ Metatarsal Exostoses	165	14.82±1.806	a	
	Mares	No Metacarpal/	537	12.20±0.884	a	0.547

		Metatarsal Exostoses				
		Unilateral	74	14.95 \pm 2.725	a	
		Metacarpal/ Metatarsal Exostoses				
		Multiple Metacarpal/ Metatarsal Exostoses	36	11.58 \pm 3.264	a	
	Geldings	No Metacarpal/ Metatarsal Exostoses	1,837	16.23 \pm 0.539	a	0.252
		Unilateral	319	13.93 \pm 1.152	a	
		Metacarpal/ Metatarsal Exostoses				
		Multiple Metacarpal/ Metatarsal Exostoses	129	15.73 \pm 2.122	a	
Wins at Age 7 Years Strike Rate	All Horses	No Metacarpal/ Metatarsal Exostoses	1,749	8.21 \pm 0.416	a	0.293
		Unilateral	301	8.44 \pm 1.105	a	
		Metacarpal/ Metatarsal Exostoses				
		Multiple Metacarpal/ Metatarsal Exostoses	117	10.88 \pm 1.954	a	
	Mares	No Metacarpal/ Metatarsal Exostoses	316	4.05 \pm 0.671	a	0.269
		Unilateral	59	5.60 \pm 2.540	a	
		Metacarpal/ Metatarsal Exostoses				
		Multiple Metacarpal/ Metatarsal Exostoses	20	8.62 \pm 3.057	a	
	Geldings	No Metacarpal/ Metatarsal Exostoses	1,431	9.09 \pm 0.483	a	0.511
		Unilateral	242	9.13 \pm 1.226	a	
		Metacarpal/ Metatarsal Exostoses				
		Multiple Metacarpal/ Metatarsal Exostoses	97	11.35 \pm 2.274	a	
Places at Age 7 Years Strike Rate	All Horses	No Metacarpal/ Metatarsal Exostoses	1,749	15.68 \pm 0.550	a	0.761
		Unilateral	301	14.86 \pm 1.329	a	
		Metacarpal/ Metatarsal Exostoses				
		Multiple Metacarpal/ Metatarsal Exostoses	117	16.57 \pm 1.942	a	
	Mares	No Metacarpal/ Metatarsal Exostoses	316	14.40 \pm 1.245	a	0.769
		Unilateral	59	12.56 \pm 3.058	a	
		Metacarpal/ Metatarsal Exostoses				
		Multiple Metacarpal/ Metatarsal Exostoses	20	16.34 \pm 5.199	a	
	Geldings	No Metacarpal/ Metatarsal Exostoses	1,431	15.93 \pm 0.612	a	0.904

		Unilateral Metacarpal/ Metatarsal Exostoses	242	15.42 \pm 1.476	a	
		Multiple Metacarpal/ Metatarsal Exostoses	97	16.62 \pm 2.097	a	
Wins at Age 8 Years Strike Rate	All Horses	No Metacarpal/ Metatarsal Exostoses	1,226	8.38 \pm 0.530	a	0.795
		Unilateral Metacarpal/ Metatarsal Exostoses	207	8.07 \pm 1.256	a	
		Multiple Metacarpal/ Metatarsal Exostoses	71	6.90 \pm 1.759	a	
	Mares	No Metacarpal/ Metatarsal Exostoses	176	7.14 \pm 1.723	a	0.893
		Unilateral Metacarpal/ Metatarsal Exostoses	26	6.41 \pm 2.424	a	
		Multiple Metacarpal/ Metatarsal Exostoses	8	3.57 \pm 2.338	a	
	Geldings	No Metacarpal/ Metatarsal Exostoses	1,048	8.54 \pm 0.548	a	0.865
		Unilateral Metacarpal/ Metatarsal Exostoses	181	8.31 \pm 1.395	a	
		Multiple Metacarpal/ Metatarsal Exostoses	63	7.32 \pm 1.958	a	
	All Horses	No Metacarpal/ Metatarsal Exostoses	1,226	15.34 \pm 0.601	a	0.691
		Unilateral Metacarpal/ Metatarsal Exostoses	207	15.92 \pm 1.613	a	
		Multiple Metacarpal/ Metatarsal Exostoses	71	17.48 \pm 2.959	a	
Places at Age 8 Years Strike Rate	Mares	No Metacarpal/ Metatarsal Exostoses	176	13.00 \pm 1.403	a	0.429
		Unilateral Metacarpal/ Metatarsal Exostoses	26	18.35 \pm 5.787	a	
		Multiple Metacarpal/ Metatarsal Exostoses	8	11.50 \pm 4.597	a	
	Geldings	No Metacarpal/ Metatarsal Exostoses	1,048	15.71 \pm 0.662	a	0.661
		Unilateral Metacarpal/ Metatarsal Exostoses	181	15.57 \pm 1.653	a	
		Multiple Metacarpal/ Metatarsal Exostoses	63	18.24 \pm 3.279	a	
Wins up to Age 8 Years	All Horses	No Metacarpal/ Metatarsal Exostoses	3,398	5.95 \pm 0.182	a	0.243

Strike Rate		Unilateral Metacarpal/ Metatarsal Exostoses	554	6.44±0.450	a	
		Multiple Metacarpal/ Metatarsal Exostoses	227	5.06±0.578	a	
	Mares	No Metacarpal/ Metatarsal Exostoses	846	3.90±0.318	a	0.793
		Unilateral Metacarpal/ Metatarsal Exostoses	127	4.48±0.766	a	
		Multiple Metacarpal/ Metatarsal Exostoses	57	4.18±1.212	a	
	Geldings	No Metacarpal/ Metatarsal Exostoses	2,547	6.63±0.217	a	0.233
		Unilateral Metacarpal/ Metatarsal Exostoses	427	7.02±0.535	a	
		Multiple Metacarpal/ Metatarsal Exostoses	170	5.35±0.657	a	
	Places up to Age 8 Years Strike Rate	All Horses No Metacarpal/ Metatarsal Exostoses	3,398	12.26±0.272	a	0.666
		Unilateral Metacarpal/ Metatarsal Exostoses	554	11.62±0.594	a	
		Multiple Metacarpal/ Metatarsal Exostoses	227	12.27±0.997	a	
	Mares	No Metacarpal/ Metatarsal Exostoses	846	9.77±0.506	a	0.361
		Unilateral Metacarpal/ Metatarsal Exostoses	127	11.63±1.400	a	
		Multiple Metacarpal/ Metatarsal Exostoses	57	11.13±1.983	a	
	Geldings	No Metacarpal/ Metatarsal Exostoses	2,547	13.08±0.320	a	0.201
		Unilateral Metacarpal/ Metatarsal Exostoses	427	11.61±0.649	a	
		Multiple Metacarpal/ Metatarsal Exostoses	170	12.64±1.155	a	
Wins up to Age 8 Years	All Horses	No Metacarpal/ Metatarsal Exostoses	3,398	0.88±0.026	a	0.280
		Unilateral Metacarpal/ Metatarsal Exostoses	554	0.99±0.076	a	
		Multiple Metacarpal/ Metatarsal Exostoses	227	0.84±0.107	a	
	Mares	No Metacarpal/ Metatarsal Exostoses	846	0.48±0.036	a	0.652
		Unilateral	127	0.57±0.101	a	

		Metacarpal/ Metatarsal Exostoses				
		Multiple Metacarpal/ Metatarsal Exostoses	57	0.46±0.120	a	
Places up to Age 8 Years	Geldings	No Metacarpal/ Metatarsal Exostoses	2,547	1.02±0.032	a	0.461
		Unilateral Metacarpal/ Metatarsal Exostoses	427	1.12±0.092	a	
		Multiple Metacarpal/ Metatarsal Exostoses	170	0.96±0.136	a	
	All Horses	No Metacarpal/ Metatarsal Exostoses	3,398	1.74±0.042	a	0.659
		Unilateral Metacarpal/ Metatarsal Exostoses	554	1.70±0.102	a	
		Multiple Metacarpal/ Metatarsal Exostoses	227	1.59±0.137	a	
	Mares	No Metacarpal/ Metatarsal Exostoses	846	1.17±0.066	a	0.698
		Unilateral Metacarpal/ Metatarsal Exostoses	127	1.32±0.194	a	
		Multiple Metacarpal/ Metatarsal Exostoses	57	1.18±0.223	a	
	Geldings	No Metacarpal/ Metatarsal Exostoses	2,547	1.93±0.051	a	0.463
		Unilateral Metacarpal/ Metatarsal Exostoses	427	1.81±0.119	a	
		Multiple Metacarpal/ Metatarsal Exostoses	170	1.74±0.166	a	

Appendix 13

Effect of Tarsal Plantar Desmitis on Racing Performance

Table A.20: Effect of Tarsal Plantar Desmitis on Type of Racing Career

Group	Tarsal Desmitis	Plantar Desmitis	NH Only	P2P Only	NH & P2P	Chi-Square	Sig.
All Horses	No	Tarsal	1,818	578	984	5.301	0.258
	Desmitis	Plantar	53.8%	17.1%	29.1%		
	Unilateral	Tarsal	291	105	154		
	Plantar	Desmitis	52.9%	19.1%	28.0%		
Mare	Bilateral	Tarsal	124	52	86	3.236	0.519
	Plantar	Desmitis	47.3%	19.8%	32.8%		
	No	Tarsal	474	193	225		
	Desmitis	Plantar	53.1%	21.6%	25.3%		
Gelding	Unilateral	Tarsal	51	28	20	6.179	0.186
	Plantar	Desmitis	51.5%	28.3%	20.2%		
	Bilateral	Tarsal	20	7	11		
	Plantar	Desmitis	52.6%	18.4%	28.9%		

Table A.21: Proportion of Horses without Tarsal Plantar Desmitis, with Unilateral Tarsal Plantar Desmitis or with Bilateral Tarsal Plantar Desmitis that Raced at Various Ages

Variable	Group	Tarsal Desmitis	Plantar Desmitis	n	%	Chi-Square	Sig.
Raced at Age 7 Years	All Horses	No	Tarsal	1,742	51.6	0.519	0.771
		Plantar	Desmitis				
		Unilateral	Tarsal	292	53.3		
		Plantar	Desmitis				
	Mare	Bilateral	Tarsal	135	51.5	1.364	0.506
		Plantar	Desmitis				
		No	Tarsal	339	38.0		
		Plantar	Desmitis				
	Gelding	Unilateral	Tarsal	38	38.4	1.617	0.445
		Plantar	Desmitis				
		Bilateral	Tarsal	18	47.4		
		Plantar	Desmitis				
Raced at Age 8 Years	All Horses	No	Tarsal	1,402	56.6	0.246	0.884
		Plantar	Desmitis				

		Unilateral Tarsal Plantar Desmitis	192	35.0		
		Bilateral Tarsal Plantar Desmitis	95	36.3		
	Mare	No Tarsal Plantar Desmitis	188	21.1	2.633	0.268
		Unilateral Tarsal Plantar Desmitis	14	14.1		
		Bilateral Tarsal Plantar Desmitis	8	21.1		
	Gelding	No Tarsal Plantar Desmitis	1,029	41.6	1.156	0.561
		Unilateral Tarsal Plantar Desmitis	177	39.5		
		Bilateral Tarsal Plantar Desmitis	87	38.8		

Table A.22: Effect of Tarsal Plantar Desmitis on Racing Performance
Means with the same letter are not significantly different from each other

Variable	Group	Tarsal Plantar Desmitis	n	Mean \pm S.E.	Sig.
Age at First Race	All Horses	No Tarsal Plantar Desmitis	3,373	5.03 \pm 0.014	a 0.158
		Unilateral Tarsal Plantar Desmitis	548	5.11 \pm 0.037	a
		Bilateral Tarsal Plantar Desmitis	262	5.06 \pm 0.052	a
	Mares	No Tarsal Plantar Desmitis	893	5.05 \pm 0.026	a 0.240
		Unilateral Tarsal Plantar Desmitis	99	5.17 \pm 0.080	a
		Bilateral Tarsal Plantar Desmitis	38	5.18 \pm 0.124	a
	Geldings	No Tarsal Plantar Desmitis	2,476	5.03 \pm 0.016	a 0.315
		Unilateral Tarsal Plantar Desmitis	448	5.09 \pm 0.042	a
		Bilateral Tarsal Plantar Desmitis	224	5.04 \pm 0.057	a
Mean Number of Starts per Year Raced	All Horses	No Tarsal Plantar Desmitis	3,373	3.49 \pm 0.031	a 0.747
		Unilateral Tarsal Plantar Desmitis	548	3.44 \pm 0.079	a
		Bilateral Tarsal Plantar Desmitis	262	3.45 \pm 0.105	a
	Mares	No Tarsal Plantar Desmitis	893	3.42 \pm 0.064	a 0.370
		Unilateral Tarsal Plantar Desmitis	99	3.14 \pm 0.164	a

		Bilateral	Tarsal	38	3.46±0.324	a	
		Plantar Desmitis					
Mean Number of Chase Starts per Year Raced	Geldings	No	Tarsal	Plantar	2,476	3.52±0.036	a 0.825
		Desmitis					
		Unilateral	Tarsal	Plantar	448	3.50±0.089	a
		Desmitis					
		Bilateral	Tarsal	Plantar	224	3.44±0.110	a
		Desmitis					
		No	Tarsal	Plantar	3,373	0.75±0.022	a 0.353
		Desmitis					
	Mares	Unilateral	Tarsal	Plantar	548	0.70±0.054	a
		Desmitis					
		Bilateral	Tarsal	Plantar	262	0.65±0.069	a
		Desmitis					
Starts at Age 4 Years	Geldings	No	Tarsal	Plantar	893	0.30±0.029	a 0.099
		Desmitis					
		Unilateral	Tarsal	Plantar	99	0.11±0.036	a
		Desmitis					
		Bilateral	Tarsal	Plantar	38	0.28±0.098	a
		Desmitis					
		No	Tarsal	Plantar	2,476	0.91±0.027	a 0.056
		Desmitis					
	Mares	Unilateral	Tarsal	Plantar	448	0.83±0.063	a
		Desmitis					
		Bilateral	Tarsal	Plantar	224	0.71±0.078	a
		Desmitis					
Starts at Age 5 Years	All Horses	No	Tarsal	Plantar	3,373	0.58±0.023	a 0.747
		Desmitis					
		Unilateral	Tarsal	Plantar	548	0.57±0.057	a
		Desmitis					
		Bilateral	Tarsal	Plantar	262	0.52±0.076	a
		Desmitis					
	Mares	No	Tarsal	Plantar	893	0.54±0.045	a 0.928
		Desmitis					
		Unilateral	Tarsal	Plantar	99	0.49±0.145	a
		Desmitis					
	Geldings	Bilateral	Tarsal	Plantar	38	0.47±0.235	a
		Desmitis					
		No	Tarsal	Plantar	2,476	0.60±0.027	a 0.735
		Desmitis					
		Unilateral	Tarsal	Plantar	448	0.58±0.062	a
		Desmitis					
		Bilateral	Tarsal	Plantar	224	0.52±0.079	a
		Desmitis					

		Plantar Desmitis					
Starts at Age 6 Years	Mares	No Tarsal Plantar Desmitis	893	2.56±0.086	a	0.198	
		Unilateral Tarsal Plantar Desmitis	99	2.08±0.220	a		
		Bilateral Tarsal Plantar Desmitis	38	2.42±0.429	a		
	Geldings	No Tarsal Plantar Desmitis	2,476	2.46±0.049	a	0.615	
		Unilateral Tarsal Plantar Desmitis	448	2.41±0.118	a		
		Bilateral Tarsal Plantar Desmitis	224	2.30±0.142	a		
	All Horses	No Tarsal Plantar Desmitis	3,373	2.96±0.052	a	0.652	
		Unilateral Tarsal Plantar Desmitis	548	2.91±0.127	a		
		Bilateral Tarsal Plantar Desmitis	262	2.79±0.169	a		
Mares	No Tarsal Plantar Desmitis	893	2.59±0.100	a	0.872		
	Unilateral Tarsal Plantar Desmitis	99	2.57±0.293	a			
	Bilateral Tarsal Plantar Desmitis	38	2.84±0.424	a			
Geldings	No Tarsal Plantar Desmitis	2,476	3.10±0.061	a	0.279		
	Unilateral Tarsal Plantar Desmitis	448	2.98±0.141	a			
	Bilateral Tarsal Plantar Desmitis	224	2.79±0.185	a			
Starts at Age 7 Years	All Horses	No Tarsal Plantar Desmitis	3,373	2.21±0.052	a	0.686	
		Unilateral Tarsal Plantar Desmitis	548	2.31±0.129	a		
		Bilateral Tarsal Plantar Desmitis	262	2.12±0.176	a		
	Mares	No Tarsal Plantar Desmitis	893	1.54±0.090	a	0.639	
		Unilateral Tarsal Plantar Desmitis	99	1.44±0.236	a		
		Bilateral Tarsal Plantar Desmitis	38	1.92±0.507	a		
	Geldings	No Tarsal Plantar Desmitis	2,476	2.46±0.062	a	0.340	
		Unilateral Tarsal Plantar Desmitis	448	2.50±0.147	a		
		Bilateral Tarsal Plantar Desmitis	224	2.16±0.187	a		

Starts at Age 8 Years	All Horses	No Tarsal Plantar Desmitis	3,373	1.62±0.049	a	0.483
		Unilateral Tarsal Plantar Desmitis	548	1.50±0.121	a	
		Bilateral Tarsal Plantar Desmitis	262	1.47±0.158	a	
	Mares	No Tarsal Plantar Desmitis	893	0.92±0.075	a	0.181
		Unilateral Tarsal Plantar Desmitis	99	0.51±0.170	a	
		Bilateral Tarsal Plantar Desmitis	38	0.71±0.274	a	
	Geldings	No Tarsal Plantar Desmitis	2,476	1.87±0.060	a	0.241
		Unilateral Tarsal Plantar Desmitis	448	1.70±0.139	a	
		Bilateral Tarsal Plantar Desmitis	224	1.59±0.177	a	
Starts up to Age 8 Years	All Horses	No Tarsal Plantar Desmitis	3,373	9.87±0.139	a	0.420
		Unilateral Tarsal Plantar Desmitis	548	9.64±0.347	a	
		Bilateral Tarsal Plantar Desmitis	262	9.24±0.407	a	
	Mares	No Tarsal Plantar Desmitis	893	8.16±0.243	a	0.357
		Unilateral Tarsal Plantar Desmitis	99	7.09±0.584	a	
		Bilateral Tarsal Plantar Desmitis	38	8.37±1.214	a	
	Geldings	No Tarsal Plantar Desmitis	2,476	10.48±0.166	a	0.138
		Unilateral Tarsal Plantar Desmitis	448	10.17±0.399	a	
		Bilateral Tarsal Plantar Desmitis	224	9.39±0.429	a	
Win Rate	All Horses	No Tarsal Plantar Desmitis	3,373	6.77±0.203	a	0.782
		Unilateral Tarsal Plantar Desmitis	548	6.80±0.495	a	
		Bilateral Tarsal Plantar Desmitis	262	6.26±0.664	a	
	Mares	No Tarsal Plantar Desmitis	893	4.29±0.326	a	0.435
		Unilateral Tarsal Plantar Desmitis	99	2.99±0.778	a	
		Bilateral Tarsal Plantar Desmitis	38	1.14±1.172	a	
	Geldings	No Tarsal Plantar Desmitis	2,476	7.67±0.247	a	0.464

			Desmitis						
			Unilateral	Tarsal	448	7.60±0.572	a		
			Plantar Desmitis						
			Bilateral	Tarsal	224	6.62±0.749	a		
			Plantar Desmitis						
Place Rate	Strike	All Horses	No	Tarsal	Plantar	3,373	13.37±0.283	a	0.839
			Desmitis						
			Unilateral	Tarsal	548	13.13±0.687	a		
			Plantar Desmitis						
			Bilateral	Tarsal	262	13.86±0.969	a		
			Plantar Desmitis						
		Mares	No	Tarsal	Plantar	893	10.31±0.503	a	0.538
			Desmitis						
			Unilateral	Tarsal	99	12.09±1.707	a		
			Plantar Desmitis						
			Bilateral	Tarsal	38	10.76±2.340	a		
			Plantar Desmitis						
		Geldings	No	Tarsal	Plantar	2,476	14.47±0.337	a	0.387
			Desmitis						
			Unilateral	Tarsal	448	13.30±0.750	a		
			Plantar Desmitis						
			Bilateral	Tarsal	224	14.38±1.059	a		
			Plantar Desmitis						
Second Strike Rate	Place	All Horses	No	Tarsal	Plantar	3,373	6.31±0.179	a	0.400
			Desmitis						
			Unilateral	Tarsal	548	5.91±0.395	a		
			Plantar Desmitis						
			Bilateral	Tarsal	262	6.94±0.634	a		
			Plantar Desmitis						
		Mares	No	Tarsal	Plantar	893	5.03±0.356	a	0.675
			Desmitis						
			Unilateral	Tarsal	99	5.88±1.147	a		
			Plantar Desmitis						
			Bilateral	Tarsal	38	4.30±1.264	a		
			Plantar Desmitis						
		Geldings	No	Tarsal	Plantar	2,476	6.78±0.206	a	0.129
			Desmitis						
			Unilateral	Tarsal	448	5.89±0.412	a		
			Plantar Desmitis						
			Bilateral	Tarsal	224	7.39±0.706	a		
			Plantar Desmitis						
Third Strike Rate	Place	All Horses	No	Tarsal	Plantar	3,373	5.94±0.164	a	0.610
			Desmitis						
			Unilateral	Tarsal	548	5.69±0.399	a		
			Plantar Desmitis						
			Bilateral	Tarsal	262	6.40±0.626	a		
			Plantar Desmitis						
		Mares	No	Tarsal	Plantar	893	5.00±0.303	a	0.558
			Desmitis						

			Unilateral Tarsal	99	5.94 \pm 1.142	a	
			Plantar Desmitis				
			Bilateral Tarsal	38	5.85 \pm 1.443	a	
			Plantar Desmitis				
Geldings			No Tarsal Plantar	2,476	6.29 \pm 0.194	a	0.343
			Desmitis				
			Unilateral Tarsal	448	5.61 \pm 0.418	a	
			Plantar Desmitis				
			Bilateral Tarsal	224	6.50 \pm 0.691	a	
			Plantar Desmitis				
Overall Strike Rate	All Horses	No Tarsal Plantar	Desmitis	3,373	20.14 \pm 0.380	a	0.978
				548	19.93 \pm 0.941	a	
	Mares	No Tarsal Plantar	Desmitis	893	14.60 \pm 0.650	a	0.970
				99	15.09 \pm 2.011	a	
	Geldings	No Tarsal Plantar	Desmitis	2,476	22.14 \pm 0.454	a	0.467
				448	20.91 \pm 1.052	a	
National Win Rate	Hunt Strike	All Horses	No Tarsal Plantar	2,788	5.77 \pm 0.194	a	0.259
				443	5.98 \pm 0.519	a	
	Mares	No Tarsal Plantar	Desmitis	697	3.40 \pm 0.332	a	0.571
				71	2.41 \pm 0.927	a	
	Geldings	No Tarsal Plantar	Desmitis	2,089	6.56 \pm 0.232	a	0.163
				371	6.64 \pm 0.587	a	
National Place Rate	Hunt Strike	All Horses	No Tarsal Plantar	2,788	12.33 \pm 0.299	a	0.448
			Unilateral Tarsal	443	11.45 \pm 0.721	a	

			Plantar Desmitis					
			Bilateral Tarsal	209	12.91±1.069	a		
			Plantar Desmitis					
Mares			No Tarsal Plantar	697	8.77±0.533	a	0.406	
			Desmitis					
			Unilateral Tarsal	71	11.13±2.062	a		
			Plantar Desmitis					
			Bilateral Tarsal	31	9.79±2.863	a		
			Plantar Desmitis					
Geldings			No Tarsal Plantar	2,089	13.52±0.353	a	0.067	
			Desmitis					
			Unilateral Tarsal	371	11.44±0.764	a		
			Plantar Desmitis					
			Bilateral Tarsal	178	13.46±1.150	a		
			Plantar Desmitis					
Irish Point-to-Point Win Strike Rate	All Horses		No Tarsal Plantar	1,558	11.99±0.589	a	0.341	
			Desmitis					
			Unilateral Tarsal	259	9.76±1.239	a		
			Plantar Desmitis					
			Bilateral Tarsal	138	11.48±1.847	a		
			Plantar Desmitis					
Mares			No Tarsal Plantar	417	9.06±0.963	a	0.248	
			Desmitis					
			Unilateral Tarsal	48	4.41±1.308	a		
			Plantar Desmitis					
			Bilateral Tarsal	18	10.25±3.184	a		
			Plantar Desmitis					
Geldings			No Tarsal Plantar	1,138	13.05±0.721	a	0.456	
			Desmitis					
			Unilateral Tarsal	211	10.97±1.480	a		
			Plantar Desmitis					
			Bilateral Tarsal	120	11.67±2.073	a		
			Plantar Desmitis					
Irish Point-to-Point Place Strike Rate	All Horses		No Tarsal Plantar	1,558	15.48±0.600	a	0.396	
			Desmitis					
			Unilateral Tarsal	259	16.57±1.438	a		
			Plantar Desmitis					
			Bilateral Tarsal	138	18.10±2.133	a		
			Plantar Desmitis					
Mares			No Tarsal Plantar	417	12.74±0.984	a	0.882	
			Desmitis					
			Unilateral Tarsal	48	13.75±2.647	a		
			Plantar Desmitis					
			Bilateral Tarsal	18	11.07±3.585	a		
			Plantar Desmitis					
Geldings			No Tarsal Plantar	1,138	16.50±0.736	a	0.520	
			Desmitis					
			Unilateral Tarsal	211	17.21±1.659	a		
			Plantar Desmitis					

		Bilateral	Tarsal	120	19.16 \pm 2.383	a	
		Plantar Desmitis					
Mean Earnings per Race	All Horses	No Tarsal	Plantar	3,373	454.63 \pm 24.153	a	0.414
		Desmitis					
		Unilateral	Tarsal	548	416.95 \pm 51.694	a	
		Plantar Desmitis					
		Bilateral	Tarsal	262	347.54 \pm 52.214	a	
		Plantar Desmitis					
	Mares	No Tarsal	Plantar	893	223.52 \pm 21.464	a	0.628
		Desmitis					
		Unilateral	Tarsal	99	162.78 \pm 50.479	a	
		Plantar Desmitis					
		Bilateral	Tarsal	38	252.82 \pm 122.705	a	
		Plantar Desmitis					
	Geldings	No Tarsal	Plantar	2,476	538.33 \pm 31.813	a	0.200
		Desmitis					
		Unilateral	Tarsal	448	471.97 \pm 61.940	a	
		Plantar Desmitis					
		Bilateral	Tarsal	224	363.60 \pm 57.450	a	
		Plantar Desmitis					
Wins at Age 4 Years Strike Rate	All Horses	No Tarsal	Plantar	788	7.49 \pm 0.743	a	0.835
		Desmitis					
		Unilateral	Tarsal	126	7.65 \pm 1.880	a	
		Plantar Desmitis					
		Bilateral	Tarsal	56	5.80 \pm 2.702	a	
		Plantar Desmitis					
	Mares	No Tarsal	Plantar	186	3.74 \pm 1.053	a	0.447
		Desmitis					
		Unilateral	Tarsal	18	0.00 \pm 0.000	a	
		Plantar Desmitis					
		Bilateral	Tarsal	6	0.00 \pm 0.000	a	
		Plantar Desmitis					
	Geldings	No Tarsal	Plantar	601	8.62 \pm 0.913	a	0.796
		Desmitis					
		Unilateral	Tarsal	108	8.93 \pm 2.170	a	
		Plantar Desmitis					
		Bilateral	Tarsal	50	6.50 \pm 3.014	a	
		Plantar Desmitis					
Places at Age 5 Years Strike Rate	All Horses	No Tarsal	Plantar	2,473	14.16 \pm 0.480	a	0.234
		Desmitis					
		Unilateral	Tarsal	383	11.95 \pm 1.127	a	
		Plantar Desmitis					
		Bilateral	Tarsal	194	14.08 \pm 1.767	a	
		Plantar Desmitis					
	Mares	No Tarsal	Plantar	651	9.79 \pm 0.705	a	0.459
		Desmitis					
		Unilateral	Tarsal	67	8.96 \pm 2.642	a	
		Plantar Desmitis					
		Bilateral	Tarsal	26	5.38 \pm 2.130	a	

			Plantar Desmitis				
	Geldings		No Tarsal Plantar Desmitis	1,820	15.74±0.598	a	0.113
			Unilateral Tarsal Plantar Desmitis	315	12.55±1.249	a	
			Bilateral Tarsal Plantar Desmitis	168	15.42±1.995	a	
Wins at Age 6 Years Strike Rate	All Horses		No Tarsal Plantar Desmitis	2,371	8.63±0.372	a	0.677
			Unilateral Tarsal Plantar Desmitis	388	8.53±0.919	a	
			Bilateral Tarsal Plantar Desmitis	182	7.40±1.280	a	
	Mares		No Tarsal Plantar Desmitis	556	5.94±0.632	a	0.538
			Unilateral Tarsal Plantar Desmitis	65	3.93±1.294	a	
			Bilateral Tarsal Plantar Desmitis	26	6.93±4.043	a	
	Geldings		No Tarsal Plantar Desmitis	1,811	9.48±0.445	a	0.443
			Unilateral Tarsal Plantar Desmitis	322	9.49±1.069	a	
			Bilateral Tarsal Plantar Desmitis	156	7.48±1.339	a	
Places at Age 6 Years Strike Rate	All Horses		No Tarsal Plantar Desmitis	2,371	15.22±0.461	a	0.490
			Unilateral Tarsal Plantar Desmitis	388	14.19±1.087	a	
			Bilateral Tarsal Plantar Desmitis	182	16.54±1.847	a	
	Mares		No Tarsal Plantar Desmitis	556	11.89±0.847	a	0.191
			Unilateral Tarsal Plantar Desmitis	65	15.65±2.888	a	
			Bilateral Tarsal Plantar Desmitis	26	17.21±5.761	a	
	Geldings		No Tarsal Plantar Desmitis	1,811	16.20±0.540	a	0.226
			Unilateral Tarsal Plantar Desmitis	322	13.86±1.174	a	
			Bilateral Tarsal Plantar Desmitis	156	16.43±1.937	a	
Wins at Age 7 Years Strike Rate	All Horses		No Tarsal Plantar Desmitis	1,742	8.27±0.433	a	0.814
			Unilateral Tarsal Plantar Desmitis	292	8.93±1.048	a	
			Bilateral Tarsal Plantar Desmitis	135	8.79±1.339	a	

Places at Age 7 Years Strike Rate	Mares	No Tarsal Plantar Desmitis	339	4.04 \pm 0.708	a	0.221
		Unilateral Tarsal Plantar Desmitis	38	7.07 \pm 2.362	a	
		Bilateral Tarsal Plantar Desmitis	18	8.02 \pm 4.084	a	
	Geldings	No Tarsal Plantar Desmitis	1,402	9.28 \pm 0.506	a	0.974
		Unilateral Tarsal Plantar Desmitis	253	9.11 \pm 1.152	a	
		Bilateral Tarsal Plantar Desmitis	117	8.91 \pm 1.419	a	
	All Horses	No Tarsal Plantar Desmitis	1,742	15.52 \pm 0.555	a	0.575
		Unilateral Tarsal Plantar Desmitis	292	16.74 \pm 1.310	a	
		Bilateral Tarsal Plantar Desmitis	135	14.41 \pm 1.749	a	
	Mares	No Tarsal Plantar Desmitis	339	13.69 \pm 1.184	a	0.442
		Unilateral Tarsal Plantar Desmitis	38	16.43 \pm 3.866	a	
		Bilateral Tarsal Plantar Desmitis	18	19.68 \pm 6.848	a	
Places at Age 8 Years Strike Rate	Geldings	No Tarsal Plantar Desmitis	1,402	15.96 \pm 0.627	a	0.494
		Unilateral Tarsal Plantar Desmitis	253	16.59 \pm 1.384	a	
		Bilateral Tarsal Plantar Desmitis	117	13.60 \pm 1.725	a	
	All Horses	No Tarsal Plantar Desmitis	1,218	15.66 \pm 0.618	a	0.848
		Unilateral Tarsal Plantar Desmitis	192	15.10 \pm 1.585	a	
		Bilateral Tarsal Plantar Desmitis	95	14.51 \pm 2.116	a	
	Mares	No Tarsal Plantar Desmitis	188	12.94 \pm 1.403	a	0.080
		Unilateral Tarsal Plantar Desmitis	14	24.98 \pm 8.020	a	
		Bilateral Tarsal Plantar Desmitis	8	9.38 \pm 4.838	a	
	Geldings	No Tarsal Plantar Desmitis	1,029	16.14 \pm 0.684	a	0.507
		Unilateral Tarsal Plantar Desmitis	177	14.18 \pm 1.585	a	
		Bilateral Tarsal Plantar Desmitis	87	14.98 \pm 2.267	a	
Wins up to	All Horses	No Tarsal Plantar	3,373	6.00 \pm 0.183	a	0.730

Age 8 Years Strike Rate	Desmitis						
	Unilateral	Tarsal	548	6.03±0.442	a		
	Plantar Desmitis						
	Bilateral	Tarsal	262	5.47±0.583	a		
	Plantar Desmitis						
	Mares	No Tarsal	Plantar	893	4.10±0.314	a	0.483
	Desmitis						
	Unilateral	Tarsal	99	2.93±0.773	a		
	Plantar Desmitis						
	Bilateral	Tarsal	38	4.09±1.160	a		
	Plantar Desmitis						
	Geldings	No Tarsal	Plantar	2,476	6.68±0.220	a	0.428
	Desmitis						
	Unilateral	Tarsal	448	6.69±0.507	a		
	Plantar Desmitis						
	Bilateral	Tarsal	224	5.71±0.653	a		
	Plantar Desmitis						
Places up to Age 8 Years Strike Rate	All Horses		No Tarsal	Plantar	3,373	12.14±0.264	a 0.515
			Desmitis				
			Unilateral	Tarsal	548	11.91±0.638	a
			Plantar Desmitis				
			Bilateral	Tarsal	262	13.21±1.192	a
			Plantar Desmitis				
	Mares	No Tarsal	Plantar	893	9.86±0.490	a	0.446
			Desmitis				
			Unilateral	Tarsal	99	11.83±1.687	a
			Plantar Desmitis				
			Bilateral	Tarsal	38	10.62±2.297	a
			Plantar Desmitis				
	Geldings	No Tarsal	Plantar	2,476	12.96±0.312	a	0.315
			Desmitis				
			Unilateral	Tarsal	448	11.90±0.686	a
			Plantar Desmitis				
			Bilateral	Tarsal	224	13.64±1.338	a
			Plantar Desmitis				
Wins up to Age 8 Years	All Horses		No Tarsal	Plantar	3,373	0.91±0.027	a 0.302
			Desmitis				
			Unilateral	Tarsal	548	0.90±0.068	a
			Plantar Desmitis				
			Bilateral	Tarsal	262	0.75±0.080	a
			Plantar Desmitis				
	Mares	No Tarsal	Plantar	893	0.50±0.036	a	0.320
			Desmitis				
			Unilateral	Tarsal	99	0.34±0.080	a
			Plantar Desmitis				
			Bilateral	Tarsal	38	0.58±0.187	a
			Plantar Desmitis				
	Geldings	No Tarsal	Plantar	2,476	1.05±0.034	a	0.066
			Desmitis				

			Unilateral Tarsal	448	1.02±0.079	a	
			Plantar Desmitis				
			Bilateral Tarsal	224	0.78±0.088	a	
			Plantar Desmitis				
Places up to Age 8 Years	All Horses	No Tarsal	Plantar Desmitis	3,373	1.75±0.043	a	0.542
		Unilateral Tarsal	Plantar Desmitis	548	1.64±0.096	a	
		Bilateral Tarsal	Plantar Desmitis	262	1.66±0.141	a	
	Mares	No Tarsal	Plantar Desmitis	893	1.17±0.063	a	0.750
		Unilateral Tarsal	Plantar Desmitis	99	1.24±0.201	a	
		Bilateral Tarsal	Plantar Desmitis	38	1.39±0.463	a	
	Geldings	No Tarsal	Plantar Desmitis	2,476	1.96±0.053	a	0.079
		Unilateral Tarsal	Plantar Desmitis	448	1.71±0.107	a	
		Bilateral Tarsal	Plantar Desmitis	224	1.71±0.145	a	

Appendix 14

Effect of Calcaneal Bursitis s on Racing Performance

Table A.23: Effect of Calcaneal Bursitis s on Racing and Winning Status

Variable	Group	Calcaneal Bursitis	n	%	Chi-Square	Sig.
Raced	All Horses	No	4,176	82.3	0.731	0.393
		Yes	177	80.1		
	Mare	No	987	70.7	0.097	0.756
		Yes	70	69.2		
	Gelding	No	3,175	87.5	0.006	0.937
		Yes	107	87.7		
Raced by 4	All Horses	No	939	23.4	0.792	0.374
		Yes	35	20.5		
	Mare	No	199	20.7	0.360	0.548
		Yes	12	17.6		
	Gelding	No	739	24.3	0.204	0.651
		Yes	23	22.3		
Raced by 5	All Horses	No	3,117	77.7	0.024	0.878
		Yes	132	77.2		
	Mare	No	750	78.0	0.720	0.396
		Yes	50	73.5		
	Gelding	No	2,364	77.6	0.225	0.636
		Yes	82	79.6		
Win	All Horses	No	1,632	40.7	0.057	0.812
		Yes	68	39.8		
	Mare	No	274	28.5	0.009	0.924
		Yes	19	27.9		
	Gelding	No	1,356	44.5	0.373	0.541
		Yes	49	47.6		
Placed	All Horses	No	2,260	56.3	0.123	0.725
		Yes	94	55.0		
	Mare	No	438	45.5	0.051	0.821
		Yes	30	44.1		
	Gelding	No	1,819	59.7	0.238	0.625
		Yes	64	62.1		
Second	All Horses	No	1,718	42.8	0.176	0.675
		Yes	76	44.4		
	Mare	No	305	31.7	0.131	0.717
		Yes	23	33.8		
	Gelding	No	1,411	46.3	1.049	0.306
		Yes	53	51.5		
Third	All Horses	No	1,742	43.4	0.629	0.428
		Yes	69	40.4		
	Mare	No	332	34.5	0.371	0.542
		Yes	21	30.9		
	Gelding	No	1,407	46.2	0.006	0.937
		Yes	48	46.6		

Win or Place	All Horses	No	2,462	61.4	0.204	0.652
		Yes	102	59.6		
	Mare	No	481	50.0	0.220	0.639
		Yes	32	47.1		
	Gelding	No	1,978	65.0	0.395	0.530
		Yes	70	68.0		

Table A.24: Effect of Calcaneal Bursitis s on Type of Racing Career

Group	Calcaneal Bursitis s	NH Only	P2P Only	NH & P2P	Chi-Square	Sig.
All Horses	No	2,142	700	1,179	1.383	0.501
		53.3%	17.4%	29.3%		
	Yes	91	35	45		
		53.2%	20.5%	26.3%		
Mare	No	506	213	242	0.804	0.669
		52.7%	22.2%	25.2%		
	Yes	39	15	14		
		57.4%	22.1%	20.6%		
Gelding	No	1,634	485	936	0.959	0.619
		53.5%	15.9%	30.6%		
	Yes	52	20	31		
		50.5%	19.4%	30.1%		

Table A.25: Proportion of Horses without and with Calcaneal Bursitis s that Raced at Various Ages

Variable	Group	Calcaneal Bursitis	n	%	Chi-Square	Sig.
Raced at Age 7 Years	All Horses	No	2,083	51.9	0.174	0.677
		Yes	86	50.3		
	Mare	No	369	38.4	0.000	0.984
		Yes	26	38.2		
	Gelding	No	1,712	56.2	0.167	0.683
		Yes	60	58.3		
Raced at Age 8 Years	All Horses	No	1,453	36.2	2.401	0.121
		Yes	52	30.4		
	Mare	No	198	20.6	0.337	0.562
		Yes	12	17.6		
	Gelding	No	1,253	41.1	0.221	0.639
		Yes	40	38.8		

Table A.26: Effect of Calcaneal Bursitis s on Racing Performance

Variable	Group	Calcaneal Bursitis	n	Mean \pm S.E.	t-value	Sig.
Age at First Race	All Horses	No	4,012	5.04 \pm 0.013	0.317	0.752
		Yes	171	5.06 \pm 0.059		
	Mares	No	962	5.06 \pm 0.025	1.001	0.317
		Yes	68	5.16 \pm 0.100		
	Geldings	No	3,045	5.04 \pm 0.015	-0.460	0.645
		Yes	103	5.00 \pm 0.073		
Mean Number of Starts per Year Raced	All Horses	No	4,012	3.48 \pm 0.029	0.930	0.353
		Yes	171	3.61 \pm 0.139		
	Mares	No	962	3.39 \pm 0.062	0.714	0.475
		Yes	68	3.56 \pm 0.207		
	Geldings	No	3,045	3.51 \pm 0.032	0.768	0.443
		Yes	103	3.64 \pm 0.186		
Mean Number of National Hunt Starts per Year Raced	All Horses	No	4,012	2.52 \pm 0.032	0.719	0.472
		Yes	171	2.64 \pm 0.162		
	Mares	No	962	2.27 \pm 0.066	0.893	0.372
		Yes	68	2.50 \pm 0.247		
	Geldings	No	3,045	2.60 \pm 0.037	0.614	0.539
		Yes	103	2.73 \pm 0.214		
Mean Number of Hurdle Starts per Year Raced	All Horses	No	4,012	1.79 \pm 0.025	1.110	0.268
		Yes	171	1.94 \pm 0.133		
	Mares	No	962	2.01 \pm 0.059	0.344	0.731
		Yes	68	2.08 \pm 0.221		
	Geldings	No	3,045	1.72 \pm 0.026	0.717	0.475
		Yes	103	1.84 \pm 0.166		
Mean Number of Chase Starts per Year Raced	All Horses	No	4,012	0.74 \pm 0.020	-0.407	0.684
		Yes	171	0.70 \pm 0.090		
	Mares	No	962	0.27 \pm 0.026	1.236	0.220
		Yes	68	0.41 \pm 0.113		
	Geldings	No	3,045	0.89 \pm 0.024	0.013	0.990
		Yes	103	0.89 \pm 0.126		
Mean Number of Irish Point-to-Point Starts per Year Raced	All Horses	No	4,012	0.91 \pm 0.022	0.565	0.572
		Yes	171	0.97 \pm 0.110		
	Mares	No	962	1.07 \pm 0.051	-0.076	0.939
		Yes	68	1.06 \pm 0.188		
	Geldings	No	3,045	0.86 \pm 0.023	0.429	0.668
		Yes	103	0.91 \pm 0.134		
Starts at Age 4 Years	All Horses	No	4,012	0.58 \pm 0.021	-1.669	0.097
		Yes	171	0.44 \pm 0.082		
	Mares	No	962	0.54 \pm 0.045	-0.924	0.356
		Yes	68	0.38 \pm 0.133		
	Geldings	No	3,045	0.59 \pm 0.024	-0.871	0.384
		Yes	103	0.48 \pm 0.105		
Starts at Age 5 Years	All Horses	No	4,012	2.45 \pm 0.038	1.451	0.148
		Yes	171	2.76 \pm 0.214		
	Mares	No	962	2.49 \pm 0.081	0.791	0.432

		Yes	68	2.78±0.356		
		Geldings	No	3,045	2.43±0.044	1.307 0.191
			Yes	103	2.75±0.267	
Starts at Age 6 Years	All Horses	No	4,012	2.95±0.048	-0.553	0.580
		Yes	171	2.82±0.222		
	Mares	No	962	2.61±0.097	-0.321	0.748
		Yes	68	2.49±0.298		
	Geldings	No	3,045	3.06±0.055	-0.064	0.949
		Yes	103	3.04±0.311		
Starts at Age 7 Years	All Horses	No	4,012	2.23±0.047	-0.541	0.588
		Yes	171	2.10±0.218		
	Mares	No	962	1.56±0.086	-0.532	0.595
		Yes	68	1.38±0.296		
	Geldings	No	3,045	2.44±0.055	0.446	0.656
		Yes	103	2.57±0.296		
Starts at Age 8 Years	All Horses	No	4,012	1.60±0.044	-0.649	0.517
		Yes	171	1.46±0.203		
	Mares	No	962	0.88±0.071	-0.189	0.850
		Yes	68	0.82±0.260		
	Geldings	No	3,045	1.82±0.053	0.167	0.867
		Yes	103	1.87±0.283		
Starts up to Age 8 Years	All Horses	No	4,012	9.81±0.127	-0.353	0.724
		Yes	171	9.58±0.566		
	Mares	No	962	8.08±0.233	-0.253	0.800
		Yes	68	7.85±0.719		
	Geldings	No	3,045	10.35±0.148	0.461	0.645
		Yes	103	10.73±0.794		
Mean Proportion of Non-Finished Races per Start	All Horses	No	4,012	26.20±0.449	0.572	0.567
		Yes	171	27.47±2.222		
	Mares	No	962	27.49±1.032	0.322	0.747
		Yes	68	28.78±3.748		
	Geldings	No	3,045	25.80±0.493	0.297	0.766
		Yes	103	26.61±2.748		
Win Rate	All Horses	No	4,012	6.78±0.185	-0.970	0.332
		Yes	171	5.90±0.815		
	Mares	No	962	4.19±0.306	-0.384	0.701
		Yes	68	3.74±1.175		
	Geldings	No	3,045	7.59±0.222	-0.221	0.825
		Yes	103	7.32±1.091		
Place Rate	All Horses	No	4,012	13.41±0.258	-0.801	0.423
		Yes	171	12.39±1.242		
	Mares	No	962	10.61±0.491	-0.935	0.350
		Yes	68	8.83±1.782		
	Geldings	No	3,045	14.28±0.300	0.272	0.786
		Yes	103	14.74±1.660		
Second Place Strike Rate	All Horses	No	4,012	6.30±0.161	-0.116	0.908
		Yes	171	6.21±0.845		
	Mares	No	962	5.08±0.336	0.070	0.945

			Yes	68	5.18 \pm 1.622		
		Geldings	No	3,045	6.69 \pm 0.183	0.201	0.840
			Yes	103	6.90 \pm 0.908		
Overall Strike Rate	All Horses	No		4,012	20.19 \pm 0.348	-1.110	0.267
		Yes		171	18.28 \pm 1.606		
	Mares	No		962	14.81 \pm 0.629	-0.918	0.359
		Yes		68	12.57 \pm 2.273		
	Geldings	No		3,045	21.88 \pm 0.408	0.080	0.936
		Yes		103	22.06 \pm 2.132		
National Hunt Place Rate	All Horses	No		3,304	5.77 \pm 0.178	-1.082	0.280
		Yes		136	4.80 \pm 0.893		
	Mares	No		746	3.32 \pm 0.311	-0.544	0.586
		Yes		53	2.65 \pm 1.318		
	Geldings	No		2,555	6.47 \pm 0.210	-0.264	0.792
		Yes		83	6.16 \pm 1.178		
Irish Point-to-Point Win Strike Rate	All Horses	No		1,875	11.56 \pm 0.525	0.927	0.354
		Yes		80	13.96 \pm 2.568		
	Mares	No		454	8.73 \pm 0.893	-0.415	0.678
		Yes		29	7.24 \pm 2.390		
	Geldings	No		1,418	12.45 \pm 0.630	1.572	0.116
		Yes		51	17.79 \pm 3.703		
Irish Point-to-Point Place Strike Rate	All Horses	No		1,875	15.82 \pm 0.549	-0.122	0.903
		Yes		80	15.49 \pm 2.454		
	Mares	No		454	12.74 \pm 0.924	0.180	0.857
		Yes		29	13.42 \pm 3.865		
	Geldings	No		1,418	16.82 \pm 0.661	-0.041	0.967
		Yes		51	16.68 \pm 3.177		
Mean Earnings per Race	All Horses	No		4,012	446.04 \pm 21.502	-0.708	0.479
		Yes		171	371.40 \pm 79.743		
	Mares	No		962	222.82 \pm 20.548	-0.772	0.440
		Yes		68	161.43 \pm 70.540		
	Geldings	No		3,045	516.67 \pm 27.452	-0.044	0.965
		Yes		103	510.02 \pm 122.327		
Wins at Age 4 Years Strike Rate	All Horses	No		936	7.50 \pm 0.689	-0.687	0.492
		Yes		34	5.00 \pm 2.190		
	Mares	No		198	3.52 \pm 0.991	-0.872	0.384
		Yes		12	0.00 \pm 0.000		
	Geldings	No		737	8.55 \pm 0.829	-0.170	0.865
		Yes		22	7.73 \pm 3.263		
Wins at Age 5 Years Strike Rate	All Horses	No		2,924	8.07 \pm 0.362	-1.425	0.156
		Yes		126	6.15 \pm 1.300		
	Mares	No		697	4.66 \pm 0.522	-0.594	0.553
		Yes		47	3.44 \pm 1.721		
	Geldings	No		2,224	9.14 \pm 0.445	-0.578	0.563
		Yes		79	7.76 \pm 1.786		
Places at Age 5 Years Strike Rate	All Horses	No		2,924	13.91 \pm 0.438	-0.359	0.719
		Yes		126	13.14 \pm 2.163		
	Mares	No		697	9.68 \pm 0.698	-0.667	0.505

		Yes	47	7.86 \pm 1.961		
	Geldings	No	2,224	15.25 \pm 0.530	0.359	0.720
		Yes	79	16.28 \pm 3.205		
Wins at Age 6 Years Strike Rate	All Horses	No	2,822	8.62 \pm 0.342	-1.106	0.269
		Yes	119	6.75 \pm 1.443		
	Mares	No	602	5.85 \pm 0.614	-0.477	0.634
		Yes	45	4.76 \pm 1.552		
	Geldings	No	2,215	9.39 \pm 0.401	-0.645	0.519
		Yes	74	7.95 \pm 2.116		
Wins at Age 7 Years Strike Rate	All Horses	No	2,083	8.41 \pm 0.390	-0.211	0.833
		Yes	86	7.99 \pm 2.183		
	Mares	No	369	4.62 \pm 0.712	-0.615	0.539
		Yes	26	2.95 \pm 1.796		
	Geldings	No	1,712	9.20 \pm 0.446	0.402	0.688
		Yes	60	10.18 \pm 2.997		
Places at Age 7 Years Strike Rate	All Horses	No	2,083	15.37 \pm 0.482	1.492	0.139
		Yes	86	21.63 \pm 4.170		
	Mares	No	369	13.84 \pm 0.132	1.298	0.195
		Yes	26	19.72 \pm 5.828		
	Geldings	No	1,712	15.66 \pm 0.532	1.242	0.219
		Yes	60	22.46 \pm 5.444		
Wins at Age 8 Years Strike Rate	All Horses	No	1,453	8.30 \pm 0.485	-0.099	0.921
		Yes	52	8.05 \pm 2.085		
	Mares	No	198	7.27 \pm 1.561	-0.979	0.329
		Yes	12	1.04 \pm 1.042		
	Geldings	No	1,253	8.43 \pm 0.504	0.601	0.548
		Yes	40	10.15 \pm 2.609		
Wins up to Age 8 Years Strike Rate	All Horses	No	4,012	5.99 \pm 0.166	-0.635	0.525
		Yes	171	5.47 \pm 0.769		
	Mares	No	962	4.01 \pm 0.294	-0.258	0.796
		Yes	68	3.71 \pm 1.172		
	Geldings	No	3,045	6.62 \pm 0.197	0.013	0.989
		Yes	103	6.63 \pm 1.004		
Places up to Age 8 Years Strike Rate	All Horses	No	4,012	12.21 \pm 0.246	-0.656	0.512
		Yes	171	11.41 \pm 1.193		
	Mares	No	962	10.19 \pm 0.480	-0.913	0.362
		Yes	68	8.49 \pm 1.757		
	Geldings	No	3,045	12.84 \pm 0.285	0.314	0.753
		Yes	103	13.34 \pm 1.584		
Wins up to Age 8 Years	All Horses	No	4,012	0.90 \pm 0.025	-0.865	0.387
		Yes	171	0.80 \pm 0.116		
	Mares	No	962	0.49 \pm 0.034	-0.735	0.462
		Yes	68	0.40 \pm 0.111		
	Geldings	No	3,045	1.03 \pm 0.030	0.180	0.857
		Yes	103	1.06 \pm 0.174		

Appendix 15

Effect of SDDTS on Racing Performance

Table A.27: Effect of SDDTS on Racing and Winning Status

Variable	Group	SDDTS	n	%	Chi-Square	Sig.
Raced	All Horses	No	4,175	82.4	1.277	0.258
		Yes	169	79.3		
	Mare	No	1,001	69.1	0.445	0.505
		Yes	56	72.7		
	Gelding	No	3,169	87.6	2.476	0.116
		Yes	113	83.1		
Raced by 4	All Horses	No	942	23.4	1.089	0.297
		Yes	32	19.9		
	Mare	No	201	20.6	0.090	0.764
		Yes	10	18.9		
	Gelding	No	740	24.3	0.897	0.344
		Yes	22	20.4		
Raced by 5	All Horses	No	3,130	77.8	1.364	0.243
		Yes	119	73.9		
	Mare	No	758	77.6	0.080	0.777
		Yes	42	79.2		
	Gelding	No	2,369	77.9	2.647	0.104
		Yes	77	71.3		
Win	All Horses	No	1,640	40.8	0.790	0.374
		Yes	60	37.3		
	Mare	No	280	28.7	0.421	0.516
		Yes	13	24.5		
	Gelding	No	1,358	44.7	0.056	0.813
		Yes	47	43.5		
Placed	All Horses	No	2,263	56.3	0.004	0.949
		Yes	91	56.5		
	Mare	No	439	44.9	1.941	0.164
		Yes	29	54.7		
	Gelding	No	1,821	59.9	0.270	0.603
		Yes	62	57.4		
Second	All Horses	No	1,724	42.9	0.024	0.877
		Yes	70	43.5		
	Mare	No	307	31.4	1.557	0.212
		Yes	21	39.6		
	Gelding	No	1,415	46.5	0.058	0.810
		Yes	49	45.4		
Third	All Horses	No	1,743	43.3	0.076	0.782
		Yes	68	42.2		
	Mare	No	329	33.7	3.007	0.083
		Yes	24	45.3		
	Gelding	No	1,411	46.4	1.351	0.245
		Yes	44	40.7		
Win or Place	All Horses	No	2,462	61.2	0.299	0.584

		Yes	102	63.4		
	Mare	No	482	49.3	1.686	0.194
		Yes	31	58.5		
	Gelding	No	1,977	65.0	0.023	0.879
		Yes	71	65.7		

Table A.28: Effect of SDDTS on Type of Racing Career

Group	SDDTS	NH Only	P2P Only	NH & P2P	Chi-Square	Sig.
All Horses	No	2,150	706	1,176	0.130	0.937
		53.3%	17.5%	29.2%		
	Yes	83	29	48		
		51.9%	18.1%	30.0%		
Mare	No	517	218	241	0.536	0.765
		53.0%	22.3%	24.7%		
	Yes	28	10	15		
		52.8%	18.9%	28.3%		
Gelding	No	1,631	486	934	0.300	0.861
		53.5%	15.9%	30.6%		
	Yes	55	19	33		
		51.4%	17.8%	30.8%		

Table A.29: Proportion of Horses without and with SDDTS that Raced at Various Ages

Variable	Group	SDDTS	n	%	Chi-Square	Sig.
Raced at Age 7 Years	All Horses	No	2,083	51.8	0.164	0.686
		Yes	86	53.4		
	Mare	No	374	38.3	0.038	0.845
		Yes	21	39.6		
	Gelding	No	1,707	56.2	0.690	0.406
		Yes	65	60.2		
Raced at Age 8 Years	All Horses	No	1,456	36.2	2.234	0.135
		Yes	49	30.4		
	Mare	No	201	20.6	0.400	0.527
		Yes	9	17.0		
	Gelding	No	1,253	41.2	0.753	0.386
		Yes	40	37.0		

Table A.30: Effect of SDDTS on Racing Performance

Variable	Group	SDDTS	n	Mean \pm S.E.	t-value	Sig.
Age at First Race	All Horses	No	4,022	5.04 \pm 0.013	0.960	0.337
		Yes	161	5.11 \pm 0.064		
	Mares	No	977	5.07 \pm 0.026	-0.295	0.768
		Yes	53	5.04 \pm 0.093		
	Geldings	No	3,040	5.03 \pm 0.015	1.306	0.192
		Yes	108	5.14 \pm 0.084		
Mean Number of Starts per Year Raced	All Horses	No	4,022	3.49 \pm 0.029	-0.511	0.610
		Yes	161	3.41 \pm 0.134		
	Mares	No	977	3.40 \pm 0.061	0.225	0.822
		Yes	53	3.46 \pm 0.228		
	Geldings	No	3,040	3.51 \pm 0.033	-0.716	0.474
		Yes	108	3.39 \pm 0.165		
Mean Number of National Hunt Starts per Year Raced	All Horses	No	4,022	2.53 \pm 0.032	-1.412	0.158
		Yes	161	2.30 \pm 0.147		
	Mares	No	977	2.28 \pm 0.066	-0.139	0.890
		Yes	53	2.24 \pm 0.263		
	Geldings	No	3,040	2.62 \pm 0.037	-1.429	0.153
		Yes	108	2.33 \pm 0.177		
Mean Number of Chase Starts per Year Raced	All Horses	No	4,022	0.74 \pm 0.020	0.037	0.971
		Yes	161	0.74 \pm 0.106		
	Mares	No	977	0.28 \pm 0.026	0.143	0.887
		Yes	53	0.29 \pm 0.096		
	Geldings	No	3,040	0.88 \pm 0.024	0.582	0.560
		Yes	108	0.96 \pm 0.147		
Mean Number of Irish Point-to-Point Starts per Year Raced	All Horses	No	4,022	0.91 \pm 0.022	1.068	0.287
		Yes	161	1.03 \pm 0.113		
	Mares	No	977	1.06 \pm 0.050	0.628	0.530
		Yes	53	1.20 \pm 0.229		
	Geldings	No	3,040	0.86 \pm 0.024	0.700	0.484
		Yes	108	0.94 \pm 0.126		
Starts at Age 4 Years	All Horses	No	4,022	0.58 \pm 0.021	-1.408	0.161
		Yes	161	0.45 \pm 0.092		
	Mares	No	977	0.53 \pm 0.044	-0.113	0.910
		Yes	53	0.51 \pm 0.197		
	Geldings	No	3,040	0.59 \pm 0.024	-1.784	0.077
		Yes	108	0.42 \pm 0.097		
Starts at Age 6 Years	All Horses	No	4,022	2.95 \pm 0.048	-0.772	0.440
		Yes	161	2.76 \pm 0.219		
	Mares	No	977	2.60 \pm 0.095	-0.031	0.976
		Yes	53	2.58 \pm 0.386		
	Geldings	No	3,040	3.06 \pm 0.055	-0.722	0.470
		Yes	108	2.85 \pm 0.266		
Starts at Age 7 Years	All Horses	No	4,022	2.22 \pm 0.047	-0.417	0.677
		Yes	161	2.12 \pm 0.222		
	Mares	No	977	1.54 \pm 0.085	0.366	0.714
		Yes	53	1.68 \pm 0.379		

	Geldings	No	3,040	2.44±0.056	-0.341	0.733
		Yes	108	2.34±0.273		
Starts at Age 8 Years	All Horses	No	4,022	1.60±0.044	-0.870	0.384
		Yes	161	1.40±0.232		
	Mares	No	977	0.88±0.071	-0.723	0.470
		Yes	53	0.66±0.232		
	Geldings	No	3,040	1.83±0.053	-0.208	0.836
		Yes	108	1.77±0.321		
Starts up to Age 8 Years	All Horses	No	4,022	9.84±0.127	-1.797	0.074
		Yes	161	8.83±0.547		
	Mares	No	977	8.08±0.231	-0.206	0.837
		Yes	53	7.87±0.819		
	Geldings	No	3,040	10.40±0.149	-1.525	0.130
		Yes	108	9.30±0.708		
Mean Proportion of Non-Finished Races per Start	All Horses	No	4,022	26.26±0.450	-0.118	0.906
		Yes	161	25.99±2.094		
	Mares	No	977	27.80±1.028	-1.112	0.271
		Yes	53	23.42±3.798		
	Geldings	No	3,040	25.78±0.494	0.555	0.579
		Yes	108	27.26±2.509		
Win Strike Rate	All Horses	No	4,022	6.78±0.185	-0.831	0.406
		Yes	161	6.00±0.888		
	Mares	No	977	4.16±0.305	0.004	0.997
		Yes	53	4.17±1.192		
	Geldings	No	3,040	7.61±0.221	-0.601	0.548
		Yes	108	6.89±1.182		
Second Place Strike Rate	All Horses	No	4,022	6.26±0.160	1.239	0.215
		Yes	161	7.28±0.961		
	Mares	No	977	4.92±0.327	1.415	0.163
		Yes	53	8.15±2.257		
	Geldings	No	3,040	6.69±0.183	0.162	0.871
		Yes	108	6.85±0.917		
National Hunt Win Strike Rate	All Horses	No	3,310	5.74±0.178	-0.321	0.748
		Yes	130	5.44±0.909		
	Mares	No	756	3.23±0.312	0.551	0.582
		Yes	43	3.98±1.339		
	Geldings	No	2,551	6.48±0.210	-0.264	0.792
		Yes	87	6.17±1.183		
National Hunt Place Strike Rate	All Horses	No	3,310	12.19±0.271	1.042	0.299
		Yes	130	13.84±1.562		
	Mares	No	756	8.77±0.509	1.432	0.159
		Yes	43	13.42±3.208		
	Geldings	No	2,551	13.20±0.315	0.493	0.622
		Yes	87	14.05±1.727		
Irish Point-to-Place Strike Rate	All Horses	No	1,878	15.69±0.543	0.956	0.342
		Yes	77	18.78±3.183		
	Mares	No	458	12.29±0.885	1.555	0.133
		Yes	25	21.78±6.044		

	Geldings	No	1,417	16.80 \pm 0.657	0.151	0.880
		Yes	52	17.33 \pm 3.738		
Mean Earnings per Race	All Horses	No	4,022	444.39 \pm 21.432	-0.336	0.737
		Yes	161	407.96 \pm 87.393		
	Mares	No	977	219.02 \pm 20.616	-0.054	0.957
		Yes	53	214.20 \pm 53.683		
	Geldings	No	3,040	516.93 \pm 27.441	-0.094	0.925
		Yes	108	503.05 \pm 126.812		
Wins at Age 4 Years Strike Rate	All Horses	No	938	7.56 \pm 0.683	-1.386	0.175
		Yes	32	3.13 \pm 3.125		
	Mares	No	200	3.48 \pm 0.981	-0.792	0.429
		Yes	10	0.00 \pm 0.000		
	Geldings	No	737	8.64 \pm 0.823	-0.848	0.396
		Yes	22	4.55 \pm 4.545		
Places at Age 4 Years Strike Rate	All Horses	No	938	14.16 \pm 0.882	-0.779	0.436
		Yes	32	10.39 \pm 4.219		
	Mares	No	200	10.80 \pm 1.609	-0.624	0.533
		Yes	10	6.25 \pm 5.017		
	Geldings	No	737	15.09 \pm 1.032	-0.466	0.642
		Yes	22	12.27 \pm 5.725		
Wins at Age 5 Years Strike Rate	All Horses	No	2,937	7.88 \pm 0.354	1.288	0.200
		Yes	113	10.94 \pm 2.348		
	Mares	No	706	4.24 \pm 0.475	1.579	0.123
		Yes	38	10.93 \pm 4.206		
	Geldings	No	2,228	9.03 \pm 0.438	0.781	0.435
		Yes	75	10.94 \pm 2.844		
Places at Age 5 Years Strike Rate	All Horses	No	2,937	13.85 \pm 0.437	0.317	0.752
		Yes	113	14.57 \pm 2.380		
	Mares	No	706	9.41 \pm 0.681	0.976	0.330
		Yes	38	12.36 \pm 3.070		
	Geldings	No	2,228	15.27 \pm 0.530	0.145	0.885
		Yes	75	15.70 \pm 3.237		
Wins at Age 6 Years Strike Rate	All Horses	No	2,828	8.56 \pm 0.340	-0.266	0.790
		Yes	113	8.10 \pm 1.726		
	Mares	No	613	5.86 \pm 0.605	-0.638	0.524
		Yes	34	4.20 \pm 1.865		
	Geldings	No	2,210	9.33 \pm 0.399	0.208	0.835
		Yes	79	9.77 \pm 2.316		
Wins at Age 7 Years Strike Rate	All Horses	No	2,083	8.49 \pm 0.392	-1.200	0.230
		Yes	86	6.13 \pm 1.929		
	Mares	No	374	4.55 \pm 0.702	-0.231	0.818
		Yes	21	3.85 \pm 2.244		
	Geldings	No	1,707	9.32 \pm 0.450	-1.046	0.296
		Yes	65	6.86 \pm 2.448		
Places at Age 7 Years Strike Rate	All Horses	No	2,083	15.59 \pm 0.502	0.235	0.814
		Yes	86	16.18 \pm 2.390		
	Mares	No	374	13.91 \pm 1.150	1.205	0.229
		Yes	21	19.94 \pm 5.218		

	Geldings	No	1,707	15.93 \pm 0.558	-0.331	0.741
		Yes	65	14.97 \pm 2.683		
Wins at Age 8 Years Strike Rate	All Horses	No	1,456	8.38 \pm 0.486	-1.669	0.101
		Yes	49	5.56 \pm 1.621		
	Mares	No	201	7.04 \pm 1.537	-0.406	0.685
		Yes	9	4.07 \pm 2.709		
	Geldings	No	1,253	8.56 \pm 0.507	-0.933	0.351
		Yes	40	5.89 \pm 1.900		
	All Horses	No	1,456	15.46 \pm 0.563	0.565	0.572
		Yes	49	17.22 \pm 3.420		
Places at Age 8 Years Strike Rate	Mares	No	201	13.52 \pm 1.419	0.297	0.767
		Yes	9	15.56 \pm 6.781		
	Geldings	No	1,253	15.74 \pm 0.612	0.532	0.595
		Yes	40	17.60 \pm 3.936		
Wins up to Age 8 Years Strike Rate	All Horses	No	4,022	6.00 \pm 0.166	-0.882	0.378
		Yes	161	5.25 \pm 0.763		
	Mares	No	977	3.99 \pm 0.294	0.001	0.999
		Yes	53	3.99 \pm 1.166		
	Geldings	No	3,040	6.64 \pm 0.197	-0.725	0.468
		Yes	108	5.87 \pm 0.982		
Places up to Age 8 Years	All Horses	No	4,022	1.73 \pm 0.038	-0.241	0.810
		Yes	161	1.68 \pm 0.200		
	Mares	No	977	1.17 \pm 0.062	1.173	0.241
		Yes	53	1.49 \pm 0.251		
	Geldings	No	3,040	1.91 \pm 0.049	-0.527	0.598
		Yes	108	1.78 \pm 0.272		

Appendix 16

Effect of Hoof Cracks on Racing Performance

Table A.31: Effect of Hoof Cracks on Winning Status

Variable	Group	Hoof Cracks	n	%	Chi-Square	Sig.
Win	All Horses	No	1,627	40.7	0.045	0.833
		Yes	73	39.9		
	Mare	No	281	28.9	1.433	0.231
		Yes	12	21.4		
	Gelding	No	1,345	44.5	0.474	0.491
		Yes	60	47.6		
Placed	All Horses	No	2,248	56.2	0.211	0.646
		Yes	106	57.9		
	Mare	No	443	45.5	0.015	0.902
		Yes	25	44.6		
	Gelding	No	1,803	59.7	0.738	0.390
		Yes	80	63.5		
Second	All Horses	No	1,716	42.9	0.005	0.941
		Yes	78	42.6		
	Mare	No	310	31.8	0.002	0.961
		Yes	18	32.1		
	Gelding	No	1,405	46.5	0.005	0.941
		Yes	59	46.8		
Third	All Horses	No	1,728	43.2	0.331	0.565
		Yes	83	45.4		
	Mare	No	336	34.5	0.403	0.526
		Yes	17	30.4		
	Gelding	No	1,390	46.0	1.521	0.217
		Yes	65	51.6		
Win or Place	All Horses	No	2,452	61.3	0.001	0.979
		Yes	112	61.2		
	Mare	No	484	49.7	0.093	0.761
		Yes	29	51.8		
	Gelding	No	1,966	65.1	0.000	0.996
		Yes	82	65.1		

Table A.32: Effect of Hoof Cracks on Type of Racing Career

Group	Hoof Cracks	NH Only	P2P Only	NH & P2P	Chi-Square	Sig.
All Horses	No	2,136 53.3%	698 17.4%	1,175 29.3%	1.174	0.556
	Yes	97 53.0%	37 20.2%	49 26.8%		
Mare	No	518 53.2%	213 21.9%	242 24.9%	0.825	0.662
	Yes	27 48.2%	15 26.8%	14 25.0%		
Gelding	No	1,617 53.3%	483 15.9%	932 30.7%	0.570	0.752
	Yes	69 54.8%	22 17.5%	35 27.8%		

Table A.33: Proportion of Horses without and with Hoof Cracks that Raced at Various Ages

Variable	Group	Hoof Crack	n	%	Chi-Square	Sig.
Raced at Age 7 Years	All Horses	No	2,073	51.8	0.028	0.867
		Yes	96	52.5		
	Mare	No	371	38.1	0.509	0.476
		Yes	24	42.9		
	Gelding	No	1,701	56.3	0.000	0.989
		Yes	71	56.3		
Raced at Age 8 Years	All Horses	No	1,437	35.9	0.116	0.734
		Yes	68	37.2		
	Mare	No	198	20.3	0.039	0.843
		Yes	12	21.4		
	Gelding	No	1,238	41.0	0.360	0.548
		Yes	55	43.7		

Table A.34: Effect of Hoof Cracks on Racing Performance

Variable	Group	Hoof Cracks	n	Mean \pm S.E.	t-value	Sig.
Age at First Race	All Horses	No	4,000	5.04 \pm 0.013	1.644	0.100
		Yes	183	5.14 \pm 0.061		
	Mares	No	974	5.06 \pm 0.025	0.719	0.472
		Yes	56	5.14 \pm 0.106		
	Geldings	No	3,022	5.03 \pm 0.015	1.470	0.142
		Yes	126	5.14 \pm 0.075		
Mean Number of Starts per Year Raced	All Horses	No	4,000	3.48 \pm 0.029	-0.139	0.889
		Yes	183	3.46 \pm 0.132		
	Mares	No	974	3.41 \pm 0.061	-0.763	0.446
		Yes	56	3.21 \pm 0.249		
	Geldings	No	3,022	3.51 \pm 0.033	0.344	0.731
		Yes	126	3.56 \pm 0.156		
Mean Number of National Hunt Starts	All Horses	No	4,000	2.53 \pm 0.032	-0.454	0.650
		Yes	183	2.46 \pm 0.152		
	Mares	No	974	2.30 \pm 0.066	-1.062	0.288

per Raced	Year		Yes	56	2.00±0.251		
		Geldings	No	3,022	2.60±0.037	0.204	0.838
			Yes	126	2.64±0.187		
Mean Number of Hurdle Starts per Year Raced	All Horses	No		4,000	1.79±0.025	-0.403	0.687
		Yes		183	1.75±0.113		
	Mares	No		974	2.02±0.058	-0.649	0.516
		Yes		56	1.86±0.235		
	Geldings	No		3,022	1.72±0.027	-0.199	0.842
		Yes		126	1.70±0.127		
Mean Number of Irish Point- to-Point Starts per Year Raced	All Horses	No		4,000	0.91±0.022	0.629	0.530
		Yes		183	0.97±0.106		
	Mares	No		974	1.06±0.050	0.589	0.556
		Yes		56	1.19±0.237		
	Geldings	No		3,022	0.86±0.024	0.235	0.814
		Yes		126	0.89±0.112		
Starts at Age 5 Years	All Horses	No		4,000	2.46±0.039	0.097	0.923
		Yes		183	2.48±0.186		
	Mares	No		974	2.51±0.082	0.133	0.894
		Yes		56	2.55±0.317		
	Geldings	No		3,022	2.44±0.044	-0.060	0.952
		Yes		126	2.43±0.231		
Starts at Age 6 Years	All Horses	No		4,000	2.95±0.048	-0.217	0.828
		Yes		183	2.90±0.206		
	Mares	No		974	2.61±0.096	-0.668	0.505
		Yes		56	2.34±0.319		
	Geldings	No		3,022	3.05±0.055	0.294	0.768
		Yes		126	3.13±0.261		
Starts at Age 7 Years	All Horses	No		4,000	2.22±0.047	-0.236	0.813
		Yes		183	2.17±0.219		
	Mares	No		974	1.55±0.086	-0.140	0.889
		Yes		56	1.50±0.315		
	Geldings	No		3,022	2.44±0.055	0.073	0.942
		Yes		126	2.46±0.282		
Starts at Age 8 Years	All Horses	No		4,000	1.58±0.044	0.771	0.441
		Yes		183	1.75±0.226		
	Mares	No		974	0.87±0.070	-0.178	0.859
		Yes		56	0.82±0.284		
	Geldings	No		3,022	1.82±0.053	1.048	0.295
		Yes		126	2.10±0.289		
Starts up to Age 8 Years	All Horses	No		4,000	9.80±0.127	-0.177	0.859
		Yes		183	9.69±0.587		
	Mares	No		974	8.09±0.231	-0.377	0.706
		Yes		56	7.71±0.820		
	Geldings	No		3,022	10.36±0.149	0.171	0.864
		Yes		126	10.48±0.755		
Mean Proportion of Non-Finished	All Horses	No		4,000	26.18±0.448	0.683	0.495
		Yes		183	27.80±2.318		
	Mares	No		974	27.45±1.018	0.518	0.605

Races	per		Yes	56	29.72 \pm 4.689		
Start		Geldings	No	3,022	25.78 \pm 0.493	0.524	0.600
			Yes	126	27.07 \pm 2.652		
Win	Strike	All Horses	No	4,000	6.78 \pm 0.187	-0.960	0.337
Rate			Yes	183	5.93 \pm 0.656		
		Mares	No	974	4.25 \pm 0.309	-1.972	0.052
			Yes	56	2.58 \pm 0.793		
		Geldings	No	3,022	7.60 \pm 0.224	-0.282	0.778
			Yes	126	7.28 \pm 0.844		
Place	Strike	All Horses	No	4,000	13.32 \pm 0.257	0.871	0.384
Rate			Yes	183	14.39 \pm 1.272		
		Mares	No	974	10.46 \pm 0.485	0.315	0.753
			Yes	56	11.12 \pm 2.164		
		Geldings	No	3,022	14.24 \pm 0.301	0.943	0.346
			Yes	126	15.66 \pm 1.555		
Second	Place	All Horses	No	4,000	6.28 \pm 0.161	0.621	0.535
Strike	Rate		Yes	183	6.76 \pm 0.855		
		Mares	No	974	5.05 \pm 0.342	0.440	0.660
			Yes	56	5.70 \pm 1.355		
		Geldings	No	3,022	6.68 \pm 0.182	0.516	0.606
			Yes	126	7.15 \pm 1.084		
Third	Place	All Horses	No	4,000	5.93 \pm 0.151	0.400	0.689
Strike	Rate		Yes	183	6.22 \pm 0.655		
		Mares	No	974	5.13 \pm 0.296	-0.152	0.879
			Yes	56	4.94 \pm 1.340		
		Geldings	No	3,022	6.19 \pm 0.175	0.566	0.571
			Yes	126	6.68 \pm 0.734		
Overall	Strike	All Horses	No	4,000	20.10 \pm 0.348	0.136	0.892
Rate			Yes	183	20.33 \pm 1.644		
		Mares	No	974	14.72 \pm 0.625	-0.381	0.703
			Yes	56	13.70 \pm 2.451		
		Geldings	No	3,022	21.84 \pm 0.409	0.541	0.588
			Yes	126	22.95 \pm 2.054		
National	Hunt	All Horses	No	3,294	5.74 \pm 0.180	-0.217	0.828
Win	Strike		Yes	146	5.55 \pm 0.721		
Rate		Mares	No	758	3.32 \pm 0.316	-0.584	0.560
			Yes	41	2.51 \pm 0.867		
		Geldings	No	2,534	6.46 \pm 0.212	0.194	0.846
			Yes	104	6.66 \pm 0.927		
National	Hunt	All Horses	No	3,294	12.18 \pm 0.272	1.275	0.202
Place	Strike		Yes	146	13.87 \pm 1.409		
Rate		Mares	No	758	9.00 \pm 0.525	0.178	0.859
			Yes	41	9.41 \pm 2.312		
		Geldings	No	2,534	13.13 \pm 0.315	1.434	0.152
			Yes	104	15.42 \pm 1.721		
Irish	Point-to-	All Horses	No	1,869	11.78 \pm 0.531	-1.083	0.279
Point	Win		Yes	86	9.06 \pm 1.868		
Strike	Rate	Mares	No	454	8.81 \pm 0.890	-0.777	0.438

		Yes	29	6.02 \pm 2.681		
	Geldings	No	1,412	12.72 \pm 0.639	-0.656	0.512
		Yes	57	10.61 \pm 2.457		
Irish Point-to-Point Place Strike Rate	All Horses	No	1,869	15.86 \pm 0.548	-0.400	0.689
		Yes	86	14.81 \pm 2.635		
	Mares	No	454	12.66 \pm 0.909	0.517	0.605
		Yes	29	14.62 \pm 4.662		
	Geldings	No	1,412	16.89 \pm 0.661	-0.593	0.553
		Yes	57	14.91 \pm 3.220		
Mean Earnings per Race	All Horses	No	4,000	438.61 \pm 20.980	0.980	0.327
		Yes	183	538.67 \pm 132.264		
	Mares	No	974	219.38 \pm 20.492	-0.130	0.897
		Yes	56	208.10 \pm 70.418		
	Geldings	No	3,022	509.53 \pm 26.847	1.263	0.207
		Yes	126	682.49 \pm 188.308		
Wins at Age 4 Years Strike Rate	All Horses	No	937	7.40 \pm 0.676	0.116	0.908
		Yes	33	7.83 \pm 4.321		
	Mares	No	202	3.28 \pm 0.961	0.180	0.857
		Yes	8	4.17 \pm 4.167		
	Geldings	No	734	8.51 \pm 0.817	0.108	0.914
		Yes	25	9.00 \pm 5.568		
Places at Age 4 Years Strike Rate	All Horses	No	937	14.10 \pm 0.882	-0.416	0.678
		Yes	33	12.12 \pm 4.246		
	Mares	No	202	10.26 \pm 1.567	1.049	0.296
		Yes	8	18.75 \pm 9.676		
	Geldings	No	734	15.18 \pm 1.038	-0.911	0.363
		Yes	25	10.00 \pm 4.714		
Wins at Age 5 Years Strike Rate	All Horses	No	2,920	8.06 \pm 0.364	-1.223	0.223
		Yes	130	6.59 \pm 1.141		
	Mares	No	700	4.55 \pm 0.522	0.264	0.792
		Yes	44	5.11 \pm 1.672		
	Geldings	No	2,218	9.16 \pm 0.447	-0.749	0.454
		Yes	85	7.43 \pm 1.514		
Places at Age 5 Years Strike Rate	All Horses	No	2,920	13.83 \pm 0.440	0.598	0.550
		Yes	130	15.10 \pm 1.978		
	Mares	No	700	9.69 \pm 0.691	-0.738	0.461
		Yes	44	7.61 \pm 2.394		
	Geldings	No	2,218	15.15 \pm 0.534	1.338	0.181
		Yes	85	18.86 \pm 2.672		
Wins at Age 6 Years Strike Rate	All Horses	No	2,810	8.55 \pm 0.341	-0.111	0.912
		Yes	131	8.37 \pm 1.554		
	Mares	No	609	5.89 \pm 0.594	-0.766	0.444
		Yes	38	3.99 \pm 2.717		
	Geldings	No	2,197	9.30 \pm 0.403	0.482	0.630
		Yes	92	10.27 \pm 1.881		
Places at Age 6 Years Strike Rate	All Horses	No	2,810	15.09 \pm 0.423	0.792	0.428
		Yes	131	16.68 \pm 2.051		
	Mares	No	609	12.44 \pm 0.828	0.202	0.840

		Yes	38	13.14 \pm 4.260		
	Geldings	No	2,197	15.79 \pm 0.487	0.931	0.352
		Yes	92	18.05 \pm 2.328		
Places at Age 7 Years Strike Rate	All Horses	No	2,073	15.72 \pm 0.503	-1.030	0.303
		Yes	96	13.26 \pm 2.354		
	Mares	No	371	14.56 \pm 1.177	-1.175	0.241
		Yes	24	9.03 \pm 3.251		
	Geldings	No	1,701	15.98 \pm 0.556	-0.731	0.465
		Yes	71	13.94 \pm 2.885		
Wins at Age 8 Years Strike Rate	All Horses	No	1,437	8.21 \pm 0.485	0.794	0.427
		Yes	68	10.02 \pm 2.190		
	Mares	No	198	7.09 \pm 1.555	-0.490	0.625
		Yes	12	3.97 \pm 2.921		
	Geldings	No	1,238	8.38 \pm 0.505	0.985	0.325
		Yes	55	10.80 \pm 2.553		
Places at Age 8 Years Strike Rate	All Horses	No	1,437	15.43 \pm 0.567	0.727	0.468
		Yes	68	17.37 \pm 2.765		
	Mares	No	198	13.34 \pm 1.384	0.779	0.437
		Yes	12	18.00 \pm 8.378		
	Geldings	No	1,238	15.75 \pm 0.619	0.356	0.722
		Yes	55	16.82 \pm 2.904		
Wins up to Age 8 Years Strike Rate	All Horses	No	4,000	6.00 \pm 0.168	-0.837	0.403
		Yes	183	5.33 \pm 0.606		
	Mares	No	974	4.07 \pm 0.298	-1.846	0.069
		Yes	56	2.52 \pm 0.785		
	Geldings	No	3,022	6.62 \pm 0.198	-0.106	0.916
		Yes	126	6.52 \pm 0.783		
Places up to Age 8 Years Strike Rate	All Horses	No	4,000	12.13 \pm 0.246	0.920	0.358
		Yes	183	13.21 \pm 1.207		
	Mares	No	974	10.02 \pm 0.474	0.487	0.626
		Yes	56	11.02 \pm 2.160		
	Geldings	No	3,022	12.81 \pm 0.286	0.912	0.362
		Yes	126	14.11 \pm 1.463		
Wins up to Age 8 Years	All Horses	No	4,000	0.90 \pm 0.025	-0.294	0.768
		Yes	183	0.86 \pm 0.108		
	Mares	No	974	0.50 \pm 0.034	-1.088	0.277
		Yes	56	0.34 \pm 0.112		
	Geldings	No	3,022	1.03 \pm 0.031	0.236	0.813
		Yes	126	1.06 \pm 0.142		
Places up to Age 8 Years	All Horses	No	4,000	1.73 \pm 0.038	-0.134	0.894
		Yes	183	1.70 \pm 0.176		
	Mares	No	974	1.20 \pm 0.063	-0.953	0.341
		Yes	56	0.95 \pm 0.208		
	Geldings	No	3,022	1.90 \pm 0.046	0.393	0.694
		Yes	126	1.99 \pm 0.228		

Appendix 17

Effect of Cardiac Defects on Racing Performance

Table A.35: Effect of Cardiac Defects on Racing and Winning Status

Variable	Group	Cardiac Defects	n	%	Chi-Square	Sig.
Raced	All Horses	No	4,285	82.3	1.122	0.289
		Yes	59	77.6		
	Mare	No	1,048	69.4	0.618	0.432
		Yes	9	60.0		
	Gelding	No	3,232	87.6	1.716	0.190
		Yes	50	82.0		
Raced by 4	All Horses	No	965	23.4	1.653	0.199
		Yes	9	16.1		
	Mare	No	211	20.7	2.339	0.126
		Yes	0	0.00		
	Gelding	No	753	24.3	0.665	0.415
		Yes	9	19.1		
Raced by 5	All Horses	No	3,203	77.6	0.654	0.419
		Yes	46	82.1		
	Mare	No	793	77.7	0.000	0.994
		Yes	7	77.8		
	Gelding	No	2,407	77.6	0.767	0.381
		Yes	39	83.0		
Win	All Horses	No	1,681	40.7	1.060	0.303
		Yes	19	33.9		
	Mare	No	290	28.4	0.107	0.744
		Yes	3	33.3		
	Gelding	No	1,389	44.8	2.165	0.141
		Yes	16	34.0		
Placed	All Horses	No	2,323	56.3	0.019	0.889
		Yes	31	55.4		
	Mare	No	462	45.2	1.651	0.199
		Yes	6	66.7		
	Gelding	No	1,858	59.9	0.871	0.351
		Yes	25	53.2		
Second	All Horses	No	1,772	42.9	0.301	0.583
		Yes	22	39.3		
	Mare	No	324	31.7	0.664	0.415
		Yes	4	44.4		
	Gelding	No	1,446	46.6	1.292	0.256
		Yes	18	38.3		
Third	All Horses	No	1,788	43.3	0.114	0.735
		Yes	23	41.1		
	Mare	No	349	34.2	0.417	0.518
		Yes	4	44.4		
	Gelding	No	1,436	46.3	0.644	0.422
		Yes	19	40.4		
Win or Place	All Horses	No	2,531	61.3	0.134	0.714

	Yes	33	58.9		
Mare	No	507	49.7	1.032	0.310
	Yes	6	66.7		
Gelding	No	2,021	65.2	1.216	0.270
	Yes	27	57.4		

Table A.36: Effect of Cardiac Defects on Type of Racing Career

Group	Cardiac Defects	NH Only	P2P Only	NH & P2P	Chi-Square	Sig.
All Horses	No	2,201	728	1,207	1.006	0.605
		53.2%	17.6%	29.2%		
	Yes	32	7	17		
		57.1%	12.5%	30.4%		
Mare	No	538	227	255	2.247	0.325
		52.7%	22.3%	25.0%		
	Yes	7	1	1		
		77.8%	11.1%	11.1%		
Gelding	No	1,661	499	951	0.493	0.781
		53.4%	16.0%	30.6%		
	Yes	25	6	16		
		53.2%	12.8%	34.0%		

Table A.37: Proportion of Horses without and with Cardiac Defects that Raced at Various Ages

Variable	Group	Cardiac Defects	n	%	Chi-Square	Sig.
Raced at Age 7 Years	All Horses	No	2,138	51.8	0.279	0.597
		Yes	31	55.4		
	Mare	No	391	38.3	0.143	0.706
		Yes	4	44.4		
	Gelding	No	1,745	56.3	0.026	0.872
		Yes	27	57.4		
Raced at Age 8 Years	All Horses	No	1,485	36.0	0.002	0.967
		Yes	20	35.7		
	Mare	No	208	20.4	0.019	0.891
		Yes	2	22.2		
	Gelding	No	1,275	41.1	0.152	0.697
		Yes	18	38.3		

Table A.38: Effect of Cardiac Defects on Racing Performance

Variable	Group	Cardiac Defects	n	Mean \pm S.E.	t-value	Sig.
Age at First Race	All Horses	No	4,127	5.04 \pm 0.013	0.738	0.461
		Yes	56	5.13 \pm 0.108		
	Mares	No	1,021	5.07 \pm 0.025	0.584	0.560
		Yes	9	5.22 \pm 0.147		
	Geldings	No	3,101	5.04 \pm 0.015	0.581	0.561
		Yes	47	5.11 \pm 0.126		
Mean Number of Starts per Year Raced	All Horses	No	4,127	3.48 \pm 0.028	1.339	0.181
		Yes	56	3.81 \pm 0.291		
	Mares	No	1,021	3.39 \pm 0.059	1.688	0.092
		Yes	9	4.46 \pm 0.681		
	Geldings	No	3,101	3.51 \pm 0.032	0.656	0.512
		Yes	47	3.68 \pm 0.321		
Mean Number of Hurdle Starts per Year Raced	All Horses	No	4,127	1.79 \pm 0.024	0.762	0.450
		Yes	56	1.98 \pm 0.253		
	Mares	No	1,021	2.00 \pm 0.057	1.670	0.095
		Yes	9	3.02 \pm 0.585		
	Geldings	No	3,101	1.72 \pm 0.026	0.233	0.817
		Yes	47	1.79 \pm 0.273		
Mean Number of Chase Starts per Year Raced	All Horses	No	4,127	0.73 \pm 0.019	1.478	0.145
		Yes	56	1.04 \pm 0.204		
	Mares	No	1,021	0.28 \pm 0.025	0.618	0.553
		Yes	9	0.72 \pm 0.722		
	Geldings	No	3,101	0.88 \pm 0.024	1.095	0.274
		Yes	47	1.10 \pm 0.204		
Mean Number of Irish Point-to-Point Starts per Year Raced	All Horses	No	4,127	0.91 \pm 0.021	-0.695	0.487
		Yes	56	0.78 \pm 0.172		
	Mares	No	1,021	1.07 \pm 0.049	-0.664	0.507
		Yes	9	0.72 \pm 0.560		
	Geldings	No	3,101	0.86 \pm 0.023	-0.331	0.741
		Yes	47	0.80 \pm 0.178		
Starts at Age 5 Years	All Horses	No	4,127	2.45 \pm 0.038	0.898	0.369
		Yes	56	2.75 \pm 0.351		
	Mares	No	1,021	2.51 \pm 0.079	0.582	0.561
		Yes	9	3.00 \pm 0.764		
	Geldings	No	3,101	2.44 \pm 0.043	0.745	0.456
		Yes	47	2.70 \pm 0.394		
Starts at Age 6 Years	All Horses	No	4,127	2.93 \pm 0.047	1.708	0.088
		Yes	56	3.63 \pm 0.503		
	Mares	No	1,021	2.59 \pm 0.093	1.311	0.190
		Yes	9	3.89 \pm 0.735		
	Geldings	No	3,101	3.05 \pm 0.054	0.894	0.376
		Yes	47	3.57 \pm 0.585		
Starts at Age 7 Years	All Horses	No	4,127	2.21 \pm 0.046	1.434	0.157
		Yes	56	2.89 \pm 0.473		
	Mares	No	1,021	1.54 \pm 0.083	1.017	0.339

			Yes	9	2.89 \pm 1.328		
			Geldings	No	3,101	2.43 \pm 0.055	1.024 0.306
				Yes	47	2.89 \pm 0.510	
Starts at Age 8 Years	All Horses	No		4,127	1.60 \pm 0.044	-0.536	0.592
		Yes		56	1.39 \pm 0.379		
	Mares	No		1,021	0.87 \pm 0.068	0.636	0.525
		Yes		9	1.33 \pm 1.213		
	Geldings	No		3,101	1.83 \pm 0.053	-0.992	0.322
		Yes		47	1.40 \pm 0.394		
Starts up to Age 8 Years	All Horses	No		4,127	9.78 \pm 0.124	1.133	0.257
		Yes		56	11.00 \pm 1.290		
	Mares	No		1,021	8.04 \pm 0.223	1.284	0.199
		Yes		9	11.11 \pm 3.120		
	Geldings	No		3,101	10.35 \pm 0.147	0.520	0.603
		Yes		47	10.98 \pm 1.431		
Win Strike Rate	All Horses	No		4,127	6.77 \pm 0.182	-1.016	0.310
		Yes		56	5.17 \pm 1.464		
	Mares	No		1,021	4.16 \pm 0.298	-0.025	0.980
		Yes		9	4.09 \pm 2.044		
	Geldings	No		3,101	7.62 \pm 0.219	-1.250	0.211
		Yes		47	5.38 \pm 1.705		
Second Place Strike Rate	All Horses	No		4,127	6.32 \pm 0.160	-1.104	0.270
		Yes		56	4.80 \pm 1.016		
	Mares	No		1,021	5.08 \pm 0.333	0.135	0.893
		Yes		9	5.56 \pm 2.797		
	Geldings	No		3,101	6.73 \pm 0.181	-1.402	0.161
		Yes		47	4.65 \pm 1.098		
National Hunt Win Strike Rate	All Horses	No		3,391	5.75 \pm 0.177	-1.075	0.282
		Yes		49	4.16 \pm 1.077		
	Mares	No		791	3.26 \pm 0.306	0.438	0.662
		Yes		8	4.60 \pm 2.244		
	Geldings	No		2,597	6.50 \pm 0.209	-1.956	0.057
		Yes		41	4.08 \pm 1.221		
National Hunt Place Strike Rate	All Horses	No		3,391	12.28 \pm 0.270	-0.864	0.388
		Yes		49	10.33 \pm 1.778		
	Mares	No		791	9.00 \pm 0.516	0.292	0.770
		Yes		8	10.50 \pm 4.082		
	Geldings	No		2,597	13.27 \pm 0.313	-1.188	0.235
		Yes		41	10.29 \pm 1.991		
Irish Point-to-Point Win Strike Rate	All Horses	No		1,931	11.68 \pm 0.519	-0.424	0.672
		Yes		24	9.70 \pm 3.391		
	Mares	No		481	8.68 \pm 0.855	-0.654	0.513
		Yes		2	0.00 \pm 0.000		
	Geldings	No		1,447	12.67 \pm 0.629	-0.407	0.684
		Yes		22	10.59 \pm 3.646		
Irish Point-to-Point Place Strike Rate	All Horses	No		1,931	15.86 \pm 0.541	-0.766	0.444
		Yes		24	12.12 \pm 3.754		
	Mares	No		481	12.72 \pm 0.901	0.997	0.319

		Yes	2	26.67 \pm 6.667		
	Geldings	No	1,447	16.91 \pm 0.655	-1.145	0.252
		Yes	22	10.80 \pm 3.956		
Mean	All Horses	No	4,127	445.12 \pm 21.132	-0.875	0.381
Earnings per		Yes	56	286.09 \pm 80.319		
Race	Mares	No	1,021	218.52 \pm 19.898	0.135	0.893
		Yes	9	247.16 \pm 110.252		
	Geldings	No	3,101	519.83 \pm 27.217	-1.022	0.307
		Yes	47	293.55 \pm 93.691		
Wins at Age 4	All Horses	No	961	7.43 \pm 0.673	-0.269	0.788
Years Strike		Yes	9	5.56 \pm 5.556		
Rate	Mares	No	210	3.32 \pm 0.936		
		Yes	0			
	Geldings	No	750	8.56 \pm 0.817	-0.401	0.688
		Yes	9	5.56 \pm 5.556		
Places at Age	All Horses	No	961	14.12 \pm 0.871	-0.950	0.343
4 Years Strike		Yes	9	5.56 \pm 5.556		
Rate	Mares	No	210	10.58 \pm 1.550		
		Yes	0			
	Geldings	No	750	15.12 \pm 1.025	-1.020	0.308
		Yes	9	5.56 \pm 5.556		
Places at Age	All Horses	No	2,900	15.16 \pm 0.417	0.073	0.942
6 Years Strike		Yes	41	15.42 \pm 3.523		
Rate	Mares	No	639	12.42 \pm 0.825	0.616	0.538
		Yes	8	16.98 \pm 5.405		
	Geldings	No	2,256	15.90 \pm 0.480	-0.215	0.830
		Yes	33	15.04 \pm 4.208		
Wins at Age 7	All Horses	No	2,138	8.39 \pm 0.387	0.171	0.864
Years Strike		Yes	31	8.94 \pm 3.140		
Rate	Mares	No	391	4.50 \pm 0.681	0.233	0.816
		Yes	4	6.07 \pm 3.613		
	Geldings	No	1,745	9.23 \pm 0.446	0.038	0.970
		Yes	27	9.36 \pm 3.576		
Wins at Age 8	All Horses	No	1,485	8.33 \pm 0.478	-0.663	0.508
Years Strike		Yes	20	5.59 \pm 3.114		
Rate	Mares	No	208	6.89 \pm 1.489	0.144	0.885
		Yes	2	9.09 \pm 9.091		
	Geldings	No	1,275	8.53 \pm 0.500	-0.787	0.432
		Yes	18	5.20 \pm 3.379		
Places at Age	All Horses	No	1,485	15.59 \pm 0.558	-1.220	0.223
8 Years Strike		Yes	20	9.68 \pm 5.192		
Rate	Mares	No	208	13.69 \pm 1.397	-0.640	0.523
		Yes	2	4.55 \pm 4.545		
	Geldings	No	1,275	15.88 \pm 0.609	-1.089	0.276
		Yes	18	10.25 \pm 5.758		
Wins up to	All Horses	No	4,127	5.99 \pm 0.164	-1.320	0.187
Age 8 Years		Yes	56	4.13 \pm 1.056		
Strike Rate	Mares	No	1,021	3.99 \pm 0.287	0.031	0.975

			Yes	9	4.09±2.044		
			Geldings	No	3,101	6.65±0.195	-1.580 0.114
				Yes	47	4.14±1.204	
Wins up to Age 8 Years	All Horses	No		4,127	0.90±0.024	0.067	0.946
		Yes		56	0.91±0.303		
	Mares	No		1,021	0.48±0.033	0.835	0.404
		Yes		9	0.78±0.465		
	Geldings	No		3,101	1.03±0.030	-0.382	0.703
		Yes		47	0.94±0.351		
Places up to Age 8 Years	All Horses	No		4,127	1.73±0.038	-0.431	0.666
		Yes		56	1.59±0.327		
	Mares	No		1,021	1.18±0.060	1.092	0.275
		Yes		9	1.89±1.047		
	Geldings	No		3,101	1.91±0.046	-1.011	0.312
		Yes		47	1.53±0.340		

Appendix 18

Effect of Sarcoids on Racing Performance

Table A.39: Effect of Sarcoids on Racing and Winning Status

Variable	Group	Sarcoids	n	%	Chi-Square	Sig.
Raced	All Horses	No	4,141	82.2	0.294	0.588
		Yes	203	83.5		
	Mare	No	1,008	76.6	1.651	0.199
		Yes	49	69.0		
	Gelding	No	3,128	87.5	0.356	0.551
		Yes	154	86.0		
Raced by 4	All Horses	No	939	23.5	2.636	0.104
		Yes	35	18.4		
	Mare	No	203	20.7	0.451	0.502
		Yes	8	16.7		
	Gelding	No	735	24.5	2.185	0.139
		Yes	27	19.0		
Raced by 5	All Horses	No	3,107	77.8	0.988	0.320
		Yes	142	74.7		
	Mare	No	764	77.8	0.207	0.649
		Yes	36	75.0		
	Gelding	No	2,340	74.6	0.800	0.371
		Yes	106	77.8		
Win	All Horses	No	1,616	40.5	1.051	0.305
		Yes	84	44.2		
	Mare	No	280	28.5	0.046	0.830
		Yes	13	27.1		
	Gelding	No	1,334	44.4	1.734	0.188
		Yes	71	50.0		
Placed	All Horses	No	2,245	56.2	0.097	0.756
		Yes	109	57.4		
	Mare	No	448	41.7	0.289	0.591
		Yes	20	45.6		
	Gelding	No	1,794	59.7	0.506	0.477
		Yes	89	62.7		
Second	All Horses	No	1,709	42.8	0.278	0.598
		Yes	85	44.7		
	Mare	No	313	31.9	0.008	0.928
		Yes	15	31.3		
	Gelding	No	1,394	46.4	0.465	0.495
		Yes	70	49.3		
Third	All Horses	No	1,725	43.2	0.314	0.575
		Yes	86	45.3		
	Mare	No	337	34.3	0.020	0.888
		Yes	16	33.3		
	Gelding	No	1,385	46.1	0.566	0.452
		Yes	70	49.3		
Win or Place	All Horses	No	2,447	61.3	0.007	0.935

		Yes	117	61.6		
	Mare	No	492	50.1	0.739	0.390
		Yes	21	43.8		
	Gelding	No	1,952	64.9	0.425	0.515
		Yes	96	67.6		

Table A.40: Proportion of Horses without and with Sarcoids that Raced at Various Ages

Variable	Group	Sarcoids	n	%	Chi-Square	Sig.
Raced at Age 7 Years	All Horses	No	2,069	51.8	0.048	0.826
		Yes	100	52.6		
	Mare	No	377	38.4	0.015	0.901
		Yes	18	37.5		
	Gelding	No	1,690	56.2	0.128	0.720
		Yes	82	57.7		
Raced at Age 8 Years	All Horses	No	1,438	36.0	0.044	0.833
		Yes	67	35.3		
	Mare	No	199	20.3	0.198	0.656
		Yes	11	22.9		
	Gelding	No	1,237	41.2	0.165	0.685
		Yes	56	39.4		

Table A.41: Effect of Sarcoids on Racing Performance

Variable	Group	Sarcoids	n	Mean \pm S.E.	t-value	Sig.
Age at First Race	All Horses	No	3,993	5.04 \pm 0.013	1.223	0.222
		Yes	190	5.12 \pm 0.058		
	Mares	No	982	5.07 \pm 0.025	0.129	0.897
		Yes	48	5.08 \pm 0.107		
	Geldings	No	3,006	5.03 \pm 0.015	1.327	0.184
		Yes	142	5.13 \pm 0.068		
Mean Number of Starts per Year Raced	All Horses	No	3,993	3.49 \pm 0.029	-1.500	0.134
		Yes	190	3.29 \pm 0.124		
	Mares	No	982	3.41 \pm 0.061	-1.222	0.222
		Yes	48	3.07 \pm 0.277		
	Geldings	No	3,006	3.52 \pm 0.033	-1.002	0.316
		Yes	142	3.36 \pm 0.137		
Mean Number of National Hunt Starts per Year Raced	All Horses	No	3,993	2.52 \pm 0.032	1.309	0.190
		Yes	190	2.71 \pm 0.138		
	Mares	No	982	2.28 \pm 0.066	0.444	0.657
		Yes	48	2.41 \pm 0.305		
	Geldings	No	3,006	2.60 \pm 0.037	1.273	0.203
		Yes	142	2.82 \pm 0.153		
Mean Number of Hurdle Starts per Year Raced	All Horses	No	3,993	1.79 \pm 0.025	1.055	0.292
		Yes	190	1.91 \pm 0.110		
	Mares	No	982	2.00 \pm 0.058	0.732	0.464
		Yes	48	2.20 \pm 0.263		
	Geldings	No	3,006	1.72 \pm 0.027	0.742	0.458
		Yes	142	1.81 \pm 0.116		
Mean Number	All Horses	No	3,993	0.73 \pm 0.020	1.416	0.157

of Chase Starts per Year Raced		Yes	190	0.86±0.095		
	Mares	No	982	0.27±0.025	1.030	0.308
		Yes	48	0.44±0.158		
	Geldings	No	3,006	0.88±0.024	1.102	0.270
		Yes	142	1.01±0.113		
Starts at Age 5 Years	All Horses	No	3,993	2.46±0.039	-0.700	0.484
		Yes	190	2.34±0.178		
	Mares	No	982	2.53±0.081	-0.959	0.338
		Yes	48	2.17±0.331		
	Geldings	No	3,006	2.44±0.044	-0.236	0.813
		Yes	142	2.39±0.211		
Starts at Age 6 Years	All Horses	No	3,993	2.95±0.048	-0.845	0.398
		Yes	190	2.76±0.192		
	Mares	No	982	2.62±0.095	-1.178	0.239
		Yes	48	2.10±0.373		
	Geldings	No	3,006	3.06±0.055	-0.290	0.772
		Yes	142	2.99±0.222		
Starts at Age 7 Years	All Horses	No	3,993	2.22±0.047	0.102	0.918
		Yes	190	2.24±0.213		
	Mares	No	982	1.54±0.085	0.647	0.518
		Yes	48	1.79±0.435		
	Geldings	No	3,006	2.44±0.056	-0.186	0.853
		Yes	142	2.39±0.243		
Starts at Age 8 Years	All Horses	No	3,993	1.59±0.044	0.065	0.948
		Yes	190	1.61±0.200		
	Mares	No	982	0.86±0.070	0.687	0.492
		Yes	48	1.08±0.326		
	Geldings	No	3,006	1.83±0.054	-0.185	0.853
		Yes	142	1.78±0.243		
Starts up to Age 8 Years	All Horses	No	3,993	9.82±0.127	-0.773	0.439
		Yes	190	9.36±0.571		
	Mares	No	982	8.09±0.227	-0.540	0.589
		Yes	48	7.52±1.117		
	Geldings	No	3,006	10.38±0.150	-0.571	0.568
		Yes	142	9.98±0.658		
Place Rate	All Horses	No	3,993	13.32±0.258	0.799	0.424
		Yes	190	14.29±1.186		
	Mares	No	982	10.48±0.486	0.173	0.863
		Yes	48	10.87±2.148		
	Geldings	No	3,006	14.25±0.302	0.846	0.398
		Yes	142	15.45±1.402		
Second Place Strike Rate	All Horses	No	3,993	6.30±0.163	-0.101	0.919
		Yes	190	6.23±0.633		
	Mares	No	982	5.14±0.344	-0.765	0.444
		Yes	48	3.94±0.982		
	Geldings	No	3,006	6.68±0.184	0.363	0.716
		Yes	142	7.00±0.770		
Third	Place	All Horses	No	3,993	5.93±0.151	0.458 0.647

Strike Rate			Yes	190	6.25±0.670		
		Mares	No	982	5.14±0.297	-0.310	0.757
			Yes	48	4.71±1.303		
		Geldings	No	3,006	6.18±0.175	0.716	0.474
Yes	142		6.77±0.779				
National Place Rate	Hunt Strike	All Horses	No	3,272	12.18±0.274	1.173	0.241
			Yes	168	13.64±1.199		
	Mares	No	760	8.96±0.525	0.489	0.625	
		Yes	39	10.12±2.299			
	Geldings	No	2,509	13.15±0.318	1.080	0.280	
		Yes	129	14.70±1.390			
Irish Point-to-Point Strike Rate	Point-to-Win	All Horses	No	1,892	11.56±0.518	1.028	0.304
			Yes	63	14.55±3.567		
	Mares	No	470	8.77±0.872	-0.925	0.355	
		Yes	13	3.90±2.246			
	Geldings	No	1,419	12.47±0.624	1.095	0.279	
		Yes	50	17.32±4.382			
Irish Point-to-Place Strike Rate	Point-to-Place	All Horses	No	1,892	15.79±0.546	0.239	0.811
			Yes	63	16.51±2.840		
	Mares	No	470	12.91±0.916	-0.872	0.384	
		Yes	13	8.07±4.131			
	Geldings	No	1,419	16.75±0.660	0.548	0.584	
		Yes	50	18.71±3.361			
Mean Earnings per Race	Earnings	All Horses	No	3,993	433.43±21.267	1.937	0.054
			Yes	190	643.85±106.554		
	Mares	No	982	211.09±19.471	1.135	0.262	
		Yes	48	375.93±143.961			
	Geldings	No	3,006	506.16±27.395	1.676	0.096	
		Yes	142	734.41±133.408			
Wins at Age 4 Years Rate	Age 4 Strike	All Horses	No	935	7.38±0.676	0.252	0.801
			Yes	35	8.29±4.270		
	Mares	No	202	3.25±0.955	0.357	0.721	
		Yes	8	5.00±5.000			
	Geldings	No	732	8.50±0.817	0.174	0.862	
		Yes	27	9.26±5.362			
Places at Age 4 Years Rate	Age 4 Strike	All Horses	No	935	14.18±0.882	-0.843	0.399
			Yes	35	10.27±4.326		
	Mares	No	202	10.81±1.599	-0.716	0.475	
		Yes	8	5.00±5.000			
	Geldings	No	732	15.13±1.034	-0.601	0.548	
		Yes	27	11.83±5.414			
Wins at Age 5 Years Rate	Age 5 Strike	All Horses	No	2,915	7.92±0.359	0.956	0.339
			Yes	135	9.55±1.723		
	Mares	No	709	4.64±0.517	-0.535	0.593	
		Yes	35	3.38±1.893			
	Geldings	No	2,203	8.98±0.443	1.287	0.198	
		Yes	100	11.72±2.193			
Places at Age 5		All Horses	No	2,915	13.77±0.438	1.227	0.220

Years Rate	Strike		Yes	135	16.33 \pm 2.155		
		Mares	No	709	9.49 \pm 0.683	0.480	0.631
			Yes	35	11.00 \pm 2.964		
		Geldings	No	2,203	15.15 \pm 0.533	1.185	0.236
			Yes	100	18.20 \pm 2.701		
Places at Age 6 Years Rate	Strike	All Horses	No	2,808	15.07 \pm 0.423	1.071	0.284
			Yes	133	17.20 \pm 2.016		
		Mares	No	620	12.64 \pm 0.846	-0.967	0.334
			Yes	27	8.69 \pm 2.414		
		Geldings	No	2,183	15.71 \pm 0.486	1.484	0.141
			Yes	106	19.37 \pm 2.413		
Wins at Age 7 Years Rate	Strike	All Horses	No	2,069	8.29 \pm 0.391	1.226	0.220
			Yes	100	10.53 \pm 2.016		
		Mares	No	377	4.58 \pm 0.703	-0.476	0.634
			Yes	18	3.04 \pm 1.699		
		Geldings	No	1,690	9.09 \pm 0.449	1.269	0.208
			Yes	82	12.18 \pm 2.396		
Places at Age 7 Years Rate	Strike	All Horses	No	2,069	15.50 \pm 0.503	1.048	0.295
			Yes	100	17.96 \pm 2.284		
		Mares	No	377	13.89 \pm 1.140	1.383	0.168
			Yes	18	21.33 \pm 6.161		
		Geldings	No	1,690	15.83 \pm 0.560	0.533	0.594
			Yes	82	17.22 \pm 2.447		
Wins at Age 8 Years Rate	Strike	All Horses	No	1,438	8.13 \pm 0.479	1.376	0.173
			Yes	67	11.85 \pm 2.665		
		Mares	No	199	6.99 \pm 1.539	-0.215	0.830
			Yes	11	5.56 \pm 4.557		
		Geldings	No	1,237	8.27 \pm 0.498	1.561	0.124
			Yes	56	13.09 \pm 3.048		
Places at Age 8 Years Rate	Strike	All Horses	No	1,438	15.43 \pm 0.570	0.746	0.456
			Yes	67	17.43 \pm 2.466		
		Mares	No	199	13.39 \pm 1.420	0.664	0.508
			Yes	11	17.53 \pm 6.512		
		Geldings	No	1,237	15.72 \pm 0.621	0.568	0.570
			Yes	56	17.41 \pm 2.686		
Places up to Age 8 Years Strike Rate		All Horses	No	3,993	12.14 \pm 0.247	0.667	0.505
			Yes	190	12.91 \pm 1.097		
		Mares	No	982	10.07 \pm 0.475	0.045	0.964
			Yes	48	10.17 \pm 2.110		
		Geldings	No	3,006	12.81 \pm 0.288	0.757	0.449
			Yes	142	13.84 \pm 1.278		
Wins up to Age 8 Years		All Horses	No	3,993	0.89 \pm 0.025	1.800	0.073
			Yes	190	1.12 \pm 0.128		
		Mares	No	982	0.48 \pm 0.033	0.791	0.429
			Yes	48	0.60 \pm 0.208		
		Geldings	No	3,006	1.02 \pm 0.030	1.779	0.077
			Yes	142	1.30 \pm 0.154		
Places up to		All Horses	No	3,993	1.72 \pm 0.038	1.070	0.286

Age 8 Years	Yes		190	1.93±0.195		
	Mares	No	982	1.18±0.062	0.156	0.876
		Yes	48	1.23±0.288		
	Geldings	No	3,006	1.89±0.046	1.134	0.259
		Yes	142	2.17±0.240		

Appendix 19

Effect of Papillomas on Racing Performance

Table A.42: Proportion of Horses without and with Papillomas that Raced at Various Ages

Variable	Group	Papillomas	n	%	Chi-Square	Sig.
Raced at Age 8 Years	All Horses	No	1,431	36.2	1.190	0.275
		Yes	74	32.6		
	Mare	No	200	20.5	0.174	0.676
		Yes	10	18.2		
	Gelding	No	1,230	41.3	1.197	0.274
		Yes	63	37.1		

Table A.43: Effect of Papillomas on Racing Performance

Variable	Group	Papillomas	n	Mean ± S.E.	t-value	Sig.
Age at First Race	All Horses	No	3,956	5.04±0.013	1.402	0.161
		Yes	227	5.12±0.051		
	Mares	No	975	5.06±0.025	0.737	0.461
		Yes	55	5.15±0.117		
	Geldings	No	2,978	5.03±0.015	1.216	0.224
		Yes	170	5.11±0.057		
Mean Number of Irish Point-to-Point Starts per Year Raced	All Horses	No	3,956	0.90±0.022	1.577	0.115
		Yes	227	1.05±0.092		
	Mares	No	975	1.06±0.051	1.007	0.314
		Yes	55	1.28±0.211		
	Geldings	No	2,978	0.99±0.102	1.340	0.180
		Yes	170	0.85±0.024		
Starts at Age 5 Years	All Horses	No	3,956	2.47±0.039	-1.627	0.105
		Yes	227	2.22±0.153		
	Mares	No	975	2.51±0.081	-0.220	0.826
		Yes	55	2.44±0.364		
	Geldings	No	2,978	2.46±0.045	-1.812	0.072
		Yes	170	2.15±0.166		
Starts at Age 6 Years	All Horses	No	3,956	2.96±0.048	-1.533	0.127
		Yes	227	2.67±0.186		
	Mares	No	975	2.60±0.096	-0.132	0.895
		Yes	55	2.55±0.322		
	Geldings	No	2,978	3.08±0.055	-1.487	0.137
		Yes	170	2.72±0.225		
Place Strike Rate	All Horses	No	3,956	13.45±0.259	-1.362	0.173
		Yes	227	11.93±1.127		
	Mares	No	975	10.49±0.485	0.071	0.943

		Yes	55	10.64 \pm 2.175		
		Geldings	No	2,978	14.41 \pm 0.303	-1.539 0.124
			Yes	170	12.40 \pm 1.330	
Second Place Strike Rate	All Horses	No	3,956	6.33 \pm 0.162	-0.857	0.392
		Yes	227	5.73 \pm 0.733		
	Mares	No	975	5.06 \pm 0.340	0.315	0.753
		Yes	55	5.53 \pm 1.510		
	Geldings	No	2,978	6.75 \pm 0.183	-1.168	0.243
		Yes	170	5.82 \pm 0.850		
Third Place Strike Rate	All Horses	No	3,956	5.97 \pm 0.150	-0.969	0.333
		Yes	227	5.35 \pm 0.714		
	Mares	No	975	5.17 \pm 0.300	-0.689	0.491
		Yes	55	4.28 \pm 1.067		
	Geldings	No	2,978	6.24 \pm 0.173	-0.732	0.464
		Yes	170	5.68 \pm 0.887		
National Hunt Win Strike Rate	All Horses	No	3,277	5.76 \pm 0.179	-0.775	0.438
		Yes	163	5.12 \pm 0.809		
	Mares	No	766	3.34 \pm 0.314	-1.839	0.073
		Yes	33	1.71 \pm 0.833		
	Geldings	No	2,510	6.49 \pm 0.211	-0.570	0.569
		Yes	128	5.94 \pm 0.989		
Irish Point-to-Point Place Strike Rate	All Horses	No	1,841	15.80 \pm 0.551	0.109	0.913
		Yes	114	16.05 \pm 2.353		
	Mares	No	454	12.92 \pm 0.927	-0.635	0.525
		Yes	29	10.52 \pm 3.664		
	Geldings	No	1,385	16.74 \pm 0.664	0.505	0.614
		Yes	84	18.14 \pm 2.906		
Wins at Age 4 Years Strike Rate	All Horses	No	930	7.40 \pm 0.679	0.091	0.927
		Yes	40	7.71 \pm 3.743		
	Mares	No	201	3.47 \pm 0.977	-0.749	0.455
		Yes	9	0.00 \pm 0.000		
	Geldings	No	729	8.49 \pm 0.820	0.230	0.818
		Yes	30	9.44 \pm 4.905		
Places at Age 4 Years Strike Rate	All Horses	No	930	13.82 \pm 0.874	1.001	0.323
		Yes	40	19.04 \pm 5.142		
	Mares	No	201	10.30 \pm 1.589	0.880	0.380
		Yes	9	17.04 \pm 7.359		
	Geldings	No	729	14.79 \pm 1.023	0.832	0.412
		Yes	30	20.28 \pm 6.513		
Places at Age 5 Years Strike Rate	All Horses	No	2,887	13.85 \pm 0.439	0.325	0.745
		Yes	163	14.47 \pm 2.053		
	Mares	No	706	9.40 \pm 0.679	1.057	0.291
		Yes	38	12.59 \pm 3.213		
	Geldings	No	2,179	15.29 \pm 0.535	-0.056	0.955
		Yes	124	15.16 \pm 2.514		
Wins at Age 6 Years Strike Rate	All Horses	No	2,778	8.61 \pm 0.343	-0.887	0.375
		Yes	163	7.32 \pm 1.374		
	Mares	No	610	5.84 \pm 0.592	-0.432	0.666

		Yes	37	4.76+2.830		
	Geldings	No	2,165	9.41+0.406	-0.691	0.490
		Yes	124	8.20+1.593		
Wins at Age 7 Years Strike Rate	All Horses	No	2,068	8.48+0.395	-1.032	0.302
		Yes	101	6.60+1.624		
	Mares	No	376	4.64+0.705	-0.801	0.423
		Yes	19	2.11+1.447		
	Geldings	No	1,691	9.32+0.454	-0.943	0.346
		Yes	81	7.32+1.956		
Places at Age 7 Years Strike Rate	All Horses	No	2,068	15.68+0.504	-0.560	0.575
		Yes	101	14.37+2.198		
	Mares	No	376	14.17+1.145	0.232	0.817
		Yes	19	15.39+5.915		
	Geldings	No	1,691	15.98+0.561	-0.719	0.472
		Yes	81	14.10+2.382		
Places at Age 8 Years Strike Rate	All Horses	No	1,431	15.61+0.571	-0.770	0.441
		Yes	74	13.63+2.388		
	Mares	No	200	13.23+1.365	0.767	0.462
		Yes	10	21.19+10.285		
	Geldings	No	1,230	15.98+0.625	-1.570	0.121
		Yes	63	12.25+2.290		
Places up to Age 8 Years Strike Rate	All Horses	No	3,956	12.23+0.247	-0.971	0.332
		Yes	227	11.20+1.090		
	Mares	No	975	10.10+0.476	-0.205	0.838
		Yes	55	9.68+1.993		
	Geldings	No	2,978	12.92+0.287	-0.943	0.346
		Yes	170	11.75+1.304		

Appendix 20

Effect of Oral or Dental Defects and Features on Racing Performance

Table A.44: Effect of Oral or Dental Defects and Features on Racing and Winning Status

Variable	Group	Oral/Dental Defects	n	%	Chi-Square	Sig.
Raced	All Horses	No	4,258	82.3	0.091	0.763
		Yes	86	81.1		
	Mare	No	1,042	69.4	0.184	0.668
		Yes	15	65.2		
	Gelding	No	3,211	87.5	0.289	0.591
		Yes	71	85.5		
Raced by 4	All Horses	No	959	23.4	1.167	0.280
		Yes	15	18.3		
	Mare	No	207	20.4	0.855	0.355
		Yes	4	30.8		
	Gelding	No	751	24.4	2.626	0.105
		Yes	11	15.9		
Raced by 5	All Horses	No	3,191	77.8	2.323	0.128
		Yes	58	70.7		
	Mare	No	789	77.6	0.366	0.545
		Yes	11	84.6		
	Gelding	No	2,399	77.9	3.740	0.053
		Yes	47	68.1		
Win	All Horses	No	1,665	40.6	0.145	0.704
		Yes	35	42.7		
	Mare	No	289	28.4	0.035	0.852
		Yes	4	30.8		
	Gelding	No	1,374	44.6	0.003	0.960
		Yes	31	44.9		
Placed	All Horses	No	2,305	56.2	0.412	0.521
		Yes	49	59.8		
	Mare	No	461	45.3	0.376	0.540
		Yes	7	53.8		
	Gelding	No	1,841	59.8	0.033	0.857
		Yes	42	60.9		
Second	All Horses	No	1,755	42.8	0.746	0.388
		Yes	39	47.6		
	Mare	No	323	31.8	0.266	0.606
		Yes	5	38.5		
	Gelding	No	1,430	46.4	0.218	0.641
		Yes	34	49.3		
Third	All Horses	No	1,776	43.3	0.013	0.910
		Yes	35	42.7		
	Mare	No	347	34.1	0.825	0.364
		Yes	6	46.2		
	Gelding	No	1,426	46.3	0.498	0.480
		Yes	29	42.0		
Win or	All Horses	No	2,512	61.3	0.158	0.691

Place		Yes	52	63.4		
	Mare	No	505	49.7	0.725	0.395
		Yes	8	61.5		
	Gelding	No	2,004	65.1	0.052	0.820
		Yes	44	63.8		

Table A.45: Effect of Oral or Dental Defects and Features on Type of Racing Career

Group	Oral/Dental Defect	NH Only	P2P Only	NH & P2P	Chi-Square	Sig.
All Horses	No	2,180	725	1,204	3.990	0.136
		53.1%	17.6%	29.3%		
	Yes	53	10	20		
		63.9%	12.0%	24.1%		
Mare	No	536	227	253	1.918	0.383
		52.8%	22.3%	24.9%		
	Yes	9	1	3		
		69.2%	7.7%	23.1%		
Gelding	No	1,642	496	950	2.580	0.275
		53.2%	16.1%	30.8%		
	Yes	44	9	17		
		62.9%	12.9%	24.3%		

Table A.46: Proportion of Horses without and with Oral or Dental Defects and Features that Raced at Various Ages

Variable	Group	Oral/Dental Defect	n	%	Chi-Square	Sig.
Raced at Age 7 Years	All Horses	No	2,117	51.6	4.478	0.034
		Yes	52	63.4		
	Mare	No	389	38.2	0.339	0.560
		Yes	6	46.2		
	Gelding	No	1,726	56.1	3.087	0.079
		Yes	46	66.7		
Raced at Age 8 Years	All Horses	No	1,470	35.8	1.632	0.201
		Yes	35	42.7		
	Mare	No	205	20.2	2.650	0.104
		Yes	5	38.5		
	Gelding	No	1,263	41.0	0.169	0.681
		Yes	30	43.5		

Table A.47: Effect of Oral or Dental Defects and Features on Racing Performance

Variable	Group	Oral/Dental Defect	n	Mean \pm S.E.	t-value	Sig.
Mean Number of Starts per Year Raced	All Horses	No	4,101	3.48 \pm 0.028	-0.101	0.919
		Yes	82	3.46 \pm 0.213		
	Mares	No	1,017	3.40 \pm 0.060	-0.276	0.783
		Yes	13	3.25 \pm 0.458		
	Geldings	No	3,079	3.51 \pm 0.032	-0.040	0.968
		Yes	69	3.50 \pm 0.239		
Mean Number of National Hunt Starts per Year Raced	All Horses	No	4,101	2.52 \pm 0.032	1.581	0.114
		Yes	82	2.88 \pm 0.238		
	Mares	No	1,017	2.28 \pm 0.065	0.144	0.886
		Yes	13	2.36 \pm 0.471		
	Geldings	No	3,079	2.60 \pm 0.036	1.528	0.127
		Yes	69	2.97 \pm 0.269		
Mean Number of Hurdle Starts per Year Raced	All Horses	No	4,101	1.79 \pm 0.025	-0.633	0.528
		Yes	82	1.70 \pm 0.152		
	Mares	No	1,017	2.01 \pm 0.057	0.633	0.527
		Yes	13	2.33 \pm 0.472		
	Geldings	No	3,079	1.73 \pm 0.027	-0.943	0.349
		Yes	69	1.58 \pm 0.154		
Starts at Age 4 Years	All Horses	No	4,101	0.58 \pm 0.021	-1.554	0.124
		Yes	82	0.40 \pm 0.111		
	Mares	No	1,017	0.53 \pm 0.043	-0.182	0.855
		Yes	13	0.46 \pm 0.243		
	Geldings	No	3,079	0.59 \pm 0.024	-1.594	0.115
		Yes	69	0.39 \pm 0.124		
Starts at Age 6 Years	All Horses	No	4,101	2.94 \pm 0.047	0.358	0.721
		Yes	82	3.06 \pm 0.347		
	Mares	No	1,017	2.60 \pm 0.093	-0.259	0.795
		Yes	13	2.38 \pm 0.910		
	Geldings	No	3,079	3.05 \pm 0.054	0.365	0.715
		Yes	69	3.19 \pm 0.376		
Starts at Age 8 Years	All Horses	No	4,101	1.58 \pm 0.044	1.528	0.127
		Yes	82	2.06 \pm 0.313		
	Mares	No	1,017	0.86 \pm 0.068	1.363	0.173
		Yes	13	1.69 \pm 0.674		
	Geldings	No	3,079	1.82 \pm 0.053	0.869	0.385
		Yes	69	2.13 \pm 0.352		
Starts up to Age 8 Years	All Horses	No	4,101	9.78 \pm 0.125	0.887	0.375
		Yes	82	10.57 \pm 0.989		
	Mares	No	1,017	8.04 \pm 0.224	0.865	0.387
		Yes	13	9.77 \pm 2.268		
	Geldings	No	3,079	10.35 \pm 0.147	0.372	0.710
		Yes	69	10.72 \pm 1.100		
Mean Proportion of Non-Finished	All Horses	No	4,101	26.29 \pm 0.445	-0.591	0.554
		Yes	82	24.41 \pm 2.874		
	Mares	No	1,017	27.63 \pm 1.002	-0.534	0.594
		Yes	13	22.87 \pm 8.512		

Races per Start	Geldings	No	3,079	25.85 \pm 0.491	-0.347	0.728
		Yes	69	24.70 \pm 3.045		
Win Strike Rate	All Horses	No	4,101	6.74 \pm 0.181	0.408	0.683
		Yes	82	7.27 \pm 1.650		
	Mares	No	1,017	4.10 \pm 0.284	0.641	0.533
		Yes	13	8.99 \pm 7.616		
	Geldings	No	3,079	7.60 \pm 0.220	-0.442	0.658
		Yes	69	6.94 \pm 1.384		
Place Strike Rate	All Horses	No	4,101	13.34 \pm 0.253	0.792	0.428
		Yes	82	14.78 \pm 2.241		
	Mares	No	1,017	10.48 \pm 0.477	0.253	0.800
		Yes	13	11.56 \pm 4.187		
	Geldings	No	3,079	14.28 \pm 0.296	0.552	0.581
		Yes	69	15.39 \pm 2.548		
Second Place Strike Rate	All Horses	No	4,101	6.27 \pm 0.158	1.125	0.264
		Yes	82	8.05 \pm 1.583		
	Mares	No	1,017	5.09 \pm 0.334	-0.154	0.877
		Yes	13	4.64 \pm 2.312		
	Geldings	No	3,079	6.65 \pm 0.179	1.115	0.269
		Yes	69	8.70 \pm 1.825		
Third Place Strike Rate	All Horses	No	4,101	5.96 \pm 0.149	-0.977	0.329
		Yes	82	4.92 \pm 0.737		
	Mares	No	1,017	5.11 \pm 0.292	0.155	0.877
		Yes	13	5.52 \pm 2.155		
	Geldings	No	3,079	6.24 \pm 0.174	-1.222	0.222
		Yes	69	4.81 \pm 0.783		
Overall Strike Rate	All Horses	No	4,101	20.07 \pm 0.342	0.665	0.508
		Yes	82	22.05 \pm 2.950		
	Mares	No	1,017	14.58 \pm 0.605	1.099	0.272
		Yes	13	20.55 \pm 8.029		
	Geldings	No	3,079	21.87 \pm 0.404	0.142	0.888
		Yes	69	22.33 \pm 3.189		
National Hunt Win Strike Rate	All Horses	No	3,368	5.68 \pm 0.174	1.147	0.255
		Yes	72	7.75 \pm 1.795		
	Mares	No	787	3.18 \pm 0.282	0.736	0.477
		Yes	12	9.28 \pm 8.274		
	Geldings	No	2,578	6.44 \pm 0.209	0.727	0.467
		Yes	60	7.45 \pm 1.446		
National Hunt Place Strike Rate	All Horses	No	3,368	12.23 \pm 0.270	0.502	0.616
		Yes	72	13.17 \pm 2.043		
	Mares	No	787	9.04 \pm 0.517	-0.375	0.707
		Yes	12	7.46 \pm 3.436		
	Geldings	No	2,578	13.20 \pm 0.312	0.536	0.592
		Yes	60	14.31 \pm 2.336		
Irish Point-to-Point Win Strike Rate	All Horses	No	1,925	11.73 \pm 0.520	-1.203	0.229
		Yes	30	6.70 \pm 2.614		
	Mares	No	479	8.71 \pm 0.858	-0.815	0.415
		Yes	4	1.04 \pm 1.042		

		Geldings	No	1,443	12.73 \pm 0.630	-1.094	0.274
			Yes	26	7.58 \pm 2.983		
Irish Point-to-Point Place Strike Rate	All Horses	No	1,925	15.73 \pm 0.535	0.760	0.453	
		Yes	30	20.73 \pm 6.549			
	Mares	No	479	12.75 \pm 0.903	0.268	0.789	
		Yes	4	15.42 \pm 9.939			
	Geldings	No	1,443	16.73 \pm 0.646	0.644	0.525	
		Yes	26	21.54 \pm 7.441			
Mean Earnings per Race	All Horses	No	4,101	440.53 \pm 21.122	0.831	0.406	
		Yes	82	565.66 \pm 135.884			
	Mares	No	1,017	218.76 \pm 19.917	0.005	0.996	
		Yes	13	219.61 \pm 146.104			
	Geldings	No	3,079	513.89 \pm 27.224	0.638	0.524	
		Yes	69	630.86 \pm 158.222			
Wins at Age 4 Years Strike Rate	All Horses	No	955	7.48 \pm 0.677	-0.764	0.445	
		Yes	15	3.33 \pm 3.333			
	Mares	No	206	3.38 \pm 0.954	-0.493	0.623	
		Yes	4	0.00 \pm 0.000			
	Geldings	No	748	8.58 \pm 0.819	-0.595	0.552	
		Yes	11	4.55 \pm 4.545			
Places at Age 4 Years Strike Rate	All Horses	No	955	13.99 \pm 0.870	0.462	0.644	
		Yes	15	17.22 \pm 7.649			
	Mares	No	206	10.14 \pm 1.513	0.982	0.398	
		Yes	4	33.33 \pm 23.570			
	Geldings	No	748	15.06 \pm 1.027	-0.435	0.663	
		Yes	11	11.36 \pm 6.182			
Wins at Age 6 Years Strike Rate	All Horses	No	2,883	8.56 \pm 0.337	-0.334	0.738	
		Yes	58	7.76 \pm 2.358			
	Mares	No	640	5.68 \pm 0.568	0.602	0.569	
		Yes	7	14.29 \pm 14.286			
	Geldings	No	2,238	9.40 \pm 0.400	-0.952	0.341	
		Yes	51	6.86 \pm 1.927			
Places at Age 6 Years Strike Rate	All Horses	No	2,883	15.15 \pm 0.418	0.215	0.830	
		Yes	58	15.79 \pm 3.224			
	Mares	No	640	12.53 \pm 0.825	-0.622	0.534	
		Yes	7	7.62 \pm 3.616			
	Geldings	No	2,238	15.86 \pm 0.481	0.326	0.745	
		Yes	51	16.91 \pm 3.613			
Wins at Age 7 Years Strike Rate	All Horses	No	2,117	8.41 \pm 0.390	-0.289	0.772	
		Yes	52	7.68 \pm 2.072			
	Mares	No	389	4.55 \pm 0.685	-0.447	0.655	
		Yes	6	2.08 \pm 2.083			
	Geldings	No	1,726	9.25 \pm 0.450	-0.301	0.764	
		Yes	46	8.41 \pm 2.309			
Places at Age 7 Years Strike Rate	All Horses	No	2,117	15.57 \pm 0.498	0.570	0.569	
		Yes	52	17.40 \pm 3.153			
	Mares	No	389	13.97 \pm 1.127	1.826	0.069	
		Yes	6	30.71 \pm 10.540			

		Geldings	No	1,726	15.90 \pm 0.554	-0.068	0.946
			Yes	46	15.67 \pm 3.247		
Wins	at	All Horses	No	1,470	8.34 \pm 0.482	-0.628	0.530
Age	8		Yes	35	6.37 \pm 2.016		
Years		Mares	No	205	6.88 \pm 1.508	0.150	0.881
Strike Rate			Yes	5	8.33 \pm 5.270		
		Geldings	No	1,263	8.54 \pm 0.504	-0.760	0.447
			Yes	30	6.04 \pm 2.212		
Places	at	All Horses	No	1,470	15.49 \pm 0.564	0.240	0.810
Age	8		Yes	35	16.38 \pm 3.170		
Years		Mares	No	205	13.37 \pm 1.404	1.097	0.274
Strike Rate			Yes	5	23.33 \pm 8.079		
		Geldings	No	1,263	15.81 \pm 0.615	-0.147	0.883
			Yes	30	15.22 \pm 3.452		
Wins	up to	All Horses	No	4,101	5.96 \pm 0.163	0.291	0.771
Age	8		Yes	82	6.30 \pm 1.556		
Years		Mares	No	1,017	3.93 \pm 0.273	0.650	0.528
Strike Rate			Yes	13	8.88 \pm 7.621		
		Geldings	No	3,079	6.63 \pm 0.196	-0.619	0.536
			Yes	69	5.82 \pm 1.215		
Places	up to	All Horses	No	4,101	12.16 \pm 0.242	0.511	0.610
Age	8		Yes	82	13.05 \pm 2.120		
Years		Mares	No	1,017	10.07 \pm 0.467	0.153	0.879
Strike Rate			Yes	13	10.70 \pm 3.685		
		Geldings	No	3,079	12.85 \pm 0.282	0.334	0.738
			Yes	69	13.49 \pm 2.427		
Wins	up to	All Horses	No	4,101	0.90 \pm 0.024	0.247	0.805
Age	8		Yes	82	0.94 \pm 0.179		
Years		Mares	No	1,017	0.49 \pm 0.033	-0.622	0.534
			Yes	13	0.31 \pm 0.133		
		Geldings	No	3,079	1.03 \pm 0.030	0.145	0.884
			Yes	69	1.06 \pm 0.208		
Places	up to	All Horses	No	4,101	1.72 \pm 0.038	0.930	0.353
Age	8		Yes	82	1.98 \pm 0.316		
Years		Mares	No	1,017	1.18 \pm 0.060	1.380	0.168
			Yes	13	1.92 \pm 0.796		
		Geldings	No	3,079	1.90 \pm 0.046	0.266	0.790
			Yes	69	1.99 \pm 0.347		

Appendix 21

Effect of Parrot Mouth on Racing Performance

Table A.48: Effect of Parrot Mouth on Racing and Winning Status

Variable	Group	Parrot Mouth	n	%	Chi-Square	Sig.
Raced	All Horses	No	4,324	82.2	0.020	0.888
		Yes	20	83.3		
	Mare	No	1,055	69.4	2.026	0.155
		Yes	2	40.0		
	Gelding	No	3,264	87.4	0.919	0.338
		Yes	18	94.7		
Raced by 4	All Horses	No	973	23.4	3.470	0.062
		Yes	1	5.3		
	Mare	No	211	20.5	0.516	0.472
		Yes	0	0.0		
	Gelding	No	761	24.3	3.128	0.077
		Yes	1	5.9		
Raced by 5	All Horses	No	3,238	77.8	4.304	0.038
		Yes	11	57.9		
	Mare	No	798	77.6	0.576	0.448
		Yes	2	100.0		
	Gelding	No	2,437	77.8	6.047	0.014
		Yes	9	52.9		
Win	All Horses	No	1,694	40.7	0.650	0.420
		Yes	6	31.6		
	Mare	No	293	28.5	0.797	0.372
		Yes	0	0.0		
	Gelding	No	1,399	44.7	0.603	0.437
		Yes	6	35.3		
Placed	All Horses	No	2,345	56.3	0.615	0.433
		Yes	9	47.4		
	Mare	No	467	45.4	0.017	0.897
		Yes	1	50.0		
	Gelding	No	1,875	59.9	1.157	0.282
		Yes	8	47.1		
Second	All Horses	No	1,787	42.9	0.285	0.594
		Yes	7	36.8		
	Mare	No	328	31.9	0.936	0.333
		Yes	0	0.0		
	Gelding	No	1,457	46.5	0.195	0.659
		Yes	7	41.2		
Third	All Horses	No	1,804	43.3	0.324	0.569
		Yes	7	36.8		
	Mare	No	352	34.2	0.220	0.639
		Yes	1	50.0		
	Gelding	No	1,449	46.3	0.821	0.365
		Yes	6	35.3		
Win or Place	All Horses	No	2,555	61.4	1.561	0.212

	Yes	9	47.7		
Mare	No	512	49.8	0.000	0.996
	Yes	1	50.0		
Gelding	No	2,040	65.2	2.436	0.119
	Yes	8	47.1		

Table A.49: Effect of Parrot Mouth on Type of Racing Career

Group	Parrot Mouth	NH Only	P2P Only	NH & P2P	Chi-Square	Sig.
All Horses	No	2,221	733	1,219	0.939	0.625
		53.2%	17.6%	29.2%		
	Yes	12	2	5		
		63.2%	10.5%	26.3%		
Mare	No	543	228	256	1.780	0.411
		52.9%	22.2%	24.9%		
	Yes	2	0	0		
		100.0%	0.0%	0.0%		
Gelding	No	1,676	503	962	0.294	0.863
		53.4%	16.0%	30.6%		
	Yes	10	2	5		
		58.8%	11.8%	29.4%		

Table A.50: Proportion of Horses without and with Parrot Mouth that Raced at Various Ages

Variable	Group	Parrot Mouth	n	%	Chi-Square	Sig.
Raced at Age 7 Years	All Horses	No	2,159	51.8	0.005	0.946
		Yes	10	52.6		
	Mare	No	394	38.3	0.115	0.734
		Yes	1	50.0		
	Gelding	No	1,763	56.3	0.078	0.780
		Yes	9	52.9		
Raced at Age 8 Years	All Horses	No	1,498	36.0	0.006	0.937
		Yes	7	36.8		
	Mare	No	210	20.4	0.513	0.474
		Yes	0	0.0		
	Gelding	No	1,286	41.1	0.000	0.993
		Yes	7	41.2		

Table A.51: Effect of Parrot Mouth on Racing Performance

Variable	Group	Parrot Mouth	n	Mean \pm S.E.	t-value	Sig.
Mean Number of Starts per Year Raced	All Horses	No	4,164	3.48 \pm 0.028	0.558	0.577
		Yes	19	3.72 \pm 0.572		
	Mares	No	1,028	3.40 \pm 0.059	-0.172	0.863
		Yes	2	3.17 \pm 1.167		
	Geldings	No	3,131	3.51 \pm 0.032	0.621	0.534
		Yes	17	3.78 \pm 0.632		
Mean Number of National Hunt Starts per Year Raced	All Horses	No	4,164	2.52 \pm 0.032	1.775	0.076
		Yes	19	3.35 \pm 0.610		
	Mares	No	1,028	2.28 \pm 0.064	0.495	0.621
		Yes	2	3.00 \pm 1.000		
	Geldings	No	3,131	2.60 \pm 0.036	1.610	0.108
		Yes	17	3.39 \pm 0.678		
Mean Number of Hurdle Starts per Year Raced	All Horses	No	4,164	1.79 \pm 0.024	0.530	0.596
		Yes	19	1.98 \pm 0.286		
	Mares	No	1,028	2.01 \pm 0.057	0.769	0.442
		Yes	2	3.00 \pm 1.000		
	Geldings	No	3,131	1.72 \pm 0.026	0.395	0.693
		Yes	17	1.86 \pm 0.295		
Mean Number of Chase Starts per Year Raced	All Horses	No	4,164	0.73 \pm 0.019	1.137	0.270
		Yes	19	1.37 \pm 0.560		
	Mares	No	1,028	0.28 \pm 0.025	-0.487	0.626
		Yes	2	0.00 \pm 0.000		
	Geldings	No	3,131	0.88 \pm 0.024	1.055	0.307
		Yes	17	1.53 \pm 0.615		
Starts at Age 5 Years	All Horses	No	4,164	2.46 \pm 0.038	-0.630	0.529
		Yes	19	2.11 \pm 0.597		
	Mares	No	1,028	2.51 \pm 0.079	0.552	0.581
		Yes	2	3.50 \pm 1.500		
	Geldings	No	3,131	2.44 \pm 0.043	-0.855	0.393
		Yes	17	1.94 \pm 0.644		
Starts at Age 6 Years	All Horses	No	4,164	2.95 \pm 0.047	-0.606	0.545
		Yes	19	2.53 \pm 0.467		
	Mares	No	1,028	2.60 \pm 0.093	-0.046	0.963
		Yes	2	2.50 \pm 2.500		
	Geldings	No	3,131	3.06 \pm 0.054	-0.725	0.469
		Yes	17	2.53 \pm 0.478		
Starts at Age 7 Years	All Horses	No	4,164	2.22 \pm 0.046	0.887	0.387
		Yes	19	3.21 \pm 1.120		
	Mares	No	1,028	1.55 \pm 0.083	-0.026	0.979
		Yes	2	1.50 \pm 1.500		
	Geldings	No	3,131	2.44 \pm 0.054	0.787	0.443
		Yes	17	3.41 \pm 1.240		
Starts at Age 8 Years	All Horses	No	4,164	1.59 \pm 0.043	0.963	0.336
		Yes	19	2.21 \pm 0.744		
	Mares	No	1,028	0.87 \pm 0.068	-0.565	0.572
		Yes	2	0.00 \pm 0.000		

		Geldings	No	3,131	1.82±0.053	0.906	0.365
			Yes	17	2.47±0.809		
Starts up to Age 8 Years	All Horses	No	4,164	9.80±0.124	0.168	0.866	
		Yes	19	10.11±2.404			
	Mares	No	1,028	8.07±0.223	-0.112	0.911	
		Yes	2	7.50±5.500			
	Geldings	No	3,131	10.36±0.149	0.025	0.980	
		Yes	17	10.41±2.643			
Mean Proportion of Non-Finished Races per Start	All Horses	No	4,164	26.28±0.442	-1.485	0.154	
		Yes	19	20.86±3.619			
	Mares	No	1,028	27.62±0.996	-1.052	0.293	
		Yes	2	3.85±3.846			
	Geldings	No	3,131	25.85±0.487	-0.790	0.441	
		Yes	17	22.87±3.739			
Win Strike Rate	All Horses	No	4,164	6.76±0.181	-1.069	0.285	
		Yes	19	3.88±2.037			
	Mares	No	1,028	4.17±0.296	-0.620	0.535	
		Yes	2	0.00±0.000			
	Geldings	No	3,131	7.60±0.218	-1.099	0.272	
		Yes	17	4.34±2.257			
Place Strike Rate	All Horses	No	4,164	13.39±0.253	-1.503	0.133	
		Yes	19	7.75±2.432			
	Mares	No	1,028	10.51±0.474	-0.619	0.536	
		Yes	2	3.85±3.846			
	Geldings	No	3,131	14.33±0.296	-1.520	0.129	
		Yes	17	8.21±2.684			
Second Place Strike Rate	All Horses	No	4,164	6.31±0.159	-0.464	0.643	
		Yes	19	5.21±1.955			
	Mares	No	1,028	5.10±0.332	-0.678	0.498	
		Yes	2	0.00±0.000			
	Geldings	No	3,131	6.70±0.180	-0.358	0.721	
		Yes	17	5.83±2.140			
Third Place Strike Rate	All Horses	No	4,164	5.95±0.148	-1.138	0.255	
		Yes	19	3.46±1.106			
	Mares	No	1,028	5.12±0.290	-0.194	0.846	
		Yes	2	3.85±3.846			
	Geldings	No	3,131	6.22±0.172	-1.204	0.229	
		Yes	17	3.42±1.200			
Overall Strike Rate	All Horses	No	4,164	20.15±0.341	-1.684	0.092	
		Yes	19	11.64±4.039			
	Mares	No	1,028	14.68±0.607	-0.787	0.431	
		Yes	2	3.85±3.846			
	Geldings	No	3,131	21.94±0.402	-1.716	0.086	
		Yes	17	12.55±4.461			
National Hunt Win Strike Rate	All Horses	No	3,423	5.73±0.175	-0.581	0.561	
		Yes	17	4.29±2.197			
	Mares	No	797	3.28±0.304	-0.540	0.589	
		Yes	2	0.00±0.000			

	Geldings	No	2,623	6.47 \pm 0.207	-0.589	0.556
		Yes	15	4.86 \pm 2.460		
National Hunt Place Strike Rate	All Horses	No	3,423	12.26 \pm 0.268	-0.673	0.501
		Yes	17	9.70 \pm 2.822		
	Mares	No	797	9.03 \pm 0.513	-0.474	0.635
		Yes	2	4.17 \pm 4.167		
	Geldings	No	2,623	13.24 \pm 0.311	-0.681	0.496
		Yes	15	10.43 \pm 3.133		
Irish Point-to- Point Win Strike Rate	All Horses	No	1,948	11.68 \pm 0.515	-0.804	0.421
		Yes	7	4.76 \pm 4.762		
	Mares	No	483	8.64 \pm 0.851		
		Yes	0			
	Geldings	No	1,462	12.68 \pm 0.624	-0.877	0.381
		Yes	7	4.76 \pm 4.762		
Irish Point-to- Point Place Strike Rate	All Horses	No	1,948	15.81 \pm 0.537	0.096	0.924
		Yes	7	16.67 \pm 10.911		
	Mares	No	483	12.78 \pm 0.898		
		Yes	0			
	Geldings	No	1,462	16.82 \pm 0.649	-0.016	0.987
		Yes	7	16.67 \pm 10.911		
Mean Earnings per Race	All Horses	No	4,164	444.01 \pm 20.969	-0.726	0.468
		Yes	19	218.58 \pm 81.029		
	Mares	No	1,028	219.14 \pm 19.782	-0.425	0.671
		Yes	2	28.31 \pm 28.308		
	Geldings	No	3,131	517.95 \pm 26.990	-0.756	0.450
		Yes	17	240.97 \pm 89.173		
Wins at Age 4 Years Strike Rate	All Horses	No	969	7.42 \pm 0.670	-0.356	0.722
		Yes	1	0.00		
	Mares	No	210	3.32 \pm 0.936		
		Yes	0			
	Geldings	No	758	8.54 \pm 0.811	-0.382	0.703
		Yes	1	0.00		
Places at Age 4 Years Strike Rate	All Horses	No	969	14.05 \pm 0.865	-0.522	0.602
		Yes	1	0.00		
	Mares	No	210	10.58 \pm 1.550		
		Yes	0			
	Geldings	No	758	15.03 \pm 1.017	-0.537	0.592
		Yes	1	0.00		
Places at Age 5 Years Strike Rate	All Horses	No	3,039	13.88 \pm 0.430	0.094	0.925
		Yes	11	14.56 \pm 9.116		
	Mares	No	742	9.59 \pm 0.667	-0.746	0.456
		Yes	2	0.00 \pm 0.000		
	Geldings	No	2,294	15.27 \pm 0.524	0.300	0.764
		Yes	9	17.79 \pm 10.944		
Places at Age 6 Years Strike Rate	All Horses	No	2,927	15.17 \pm 0.415	-0.305	0.760
		Yes	14	13.33 \pm 7.462		
	Mares	No	646	12.50 \pm 0.818	-0.601	0.548
		Yes	1	0.00		

	Geldings	No	2,276	15.89 \pm 0.477	-0.242	0.809
		Yes	13	14.36 \pm 7.983		
Wins at Age 7 Years Strike Rate	All Horses	No	2,159	8.39 \pm 0.385	0.276	0.783
		Yes	10	9.95 \pm 5.834		
	Mares	No	394	4.52 \pm 0.677	-0.336	0.737
		Yes	1	0.00		
	Geldings	No	1,763	9.22 \pm 0.444	0.295	0.768
		Yes	9	11.06 \pm 6.404		
Places at Age 7 Years Strike Rate	All Horses	No	2,159	15.63 \pm 0.493	-0.596	0.551
		Yes	10	11.31 \pm 4.501		
	Mares	No	394	14.18 \pm 1.126	0.856	0.393
		Yes	1	33.33		
	Geldings	No	1,763	15.93 \pm 0.548	-0.920	0.358
		Yes	9	8.86 \pm 4.223		
Wins at Age 8 Years Strike Rate	All Horses	No	1,498	8.32 \pm 0.475	-0.940	0.348
		Yes	7	1.79 \pm 1.786		
	Mares	No	210	6.91 \pm 1.476		
		Yes	0			
	Geldings	No	1,286	8.52 \pm 0.498	-0.997	0.319
		Yes	7	1.79 \pm 1.786		
Places at Age 8 Years Strike Rate	All Horses	No	1,498	15.52 \pm 0.557	-0.151	0.880
		Yes	7	14.29 \pm 8.411		
	Mares	No	210	13.61 \pm 1.386		
		Yes	0			
	Geldings	No	1,286	15.81 \pm 0.607	-0.184	0.854
		Yes	7	14.29 \pm 8.411		
Wins up to Age 8 Years Strike Rate	All Horses	No	4,164	5.98 \pm 0.163	-0.943	0.346
		Yes	19	3.70 \pm 2.023		
	Mares	No	1,028	4.00 \pm 0.286	-0.616	0.538
		Yes	2	0.00 \pm 0.000		
	Geldings	No	3,131	6.63 \pm 0.194	-0.946	0.344
		Yes	17	4.14 \pm 2.243		
Places up to Age 8 Years Strike Rate	All Horses	No	4,164	12.20 \pm 0.242	-1.564	0.118
		Yes	19	6.60 \pm 2.134		
	Mares	No	1,028	10.09 \pm 0.464	-0.594	0.553
		Yes	2	3.85 \pm 3.846		
	Geldings	No	3,131	12.89 \pm 0.282	-1.559	0.119
		Yes	17	6.92 \pm 2.357		
Wins up to Age 8 Years	All Horses	No	4,164	0.90 \pm 0.024	-1.180	0.238
		Yes	19	0.47 \pm 0.234		
	Mares	No	1,028	0.49 \pm 0.033	-0.658	0.510
		Yes	2	0.00 \pm 0.000		
	Geldings	No	3,131	1.03 \pm 0.030	-1.231	0.219
		Yes	17	0.53 \pm 0.259		
Places up to Age 8 Years	All Horses	No	4,164	1.73 \pm 0.038	-0.458	0.647
		Yes	19	1.47 \pm 0.569		
	Mares	No	1,028	1.19 \pm 0.060	-0.501	0.616
		Yes	2	0.50 \pm 0.500		

	Geldings	No	3,131	1.91 \pm 0.046	-0.514	0.607
		Yes	17	1.59 \pm 0.630		

Appendix 22

Effect of an Undershot Jaw on Racing Performance

Table A.52: Effect of an Undershot Jaw on Racing and Winning Status

Variable	Group	Undershot Jaw	n	%	Chi-Square	Sig.
Raced	All Horses	No	4,337	82.2	0.152	0.697
		Yes	7	87.5		
	Mare	No	1,057	69.3	0.000	0.998
		Yes				
	Gelding	No	3,275	87.5	0.000	0.998
		Yes	7	87.5		
Raced by 4	All Horses	No	972	23.3	0.110	0.740
		Yes	2	28.6		
	Mare	No	211	20.5	0.073	0.787
		Yes				
	Gelding	No	760	24.2	0.073	0.787
		Yes	2	28.6		
Raced by 5	All Horses	No	3,244	77.7	0.158	0.691
		Yes	5	71.4		
	Mare	No	800	77.7	0.159	0.690
		Yes				
	Gelding	No	2,441	77.7	0.159	0.690
		Yes	5	71.4		
Win	All Horses	No	1,699	40.7	2.019	0.155
		Yes	1	14.3		
	Mare	No	293	28.4	2.614	0.106
		Yes				
	Gelding	No	1,404	44.7	2.614	0.106
		Yes	1	14.3		
Placed	All Horses	No	2,351	56.3	0.513	0.474
		Yes	3	42.9		
	Mare	No	468	45.5	0.839	0.360
		Yes				
	Gelding	No	1,880	59.9	0.839	0.360
		Yes	3	42.9		
Second	All Horses	No	1,791	42.9	0.000	0.999
		Yes	3	42.9		
	Mare	No	328	31.8	0.038	0.846
		Yes				
	Gelding	No	1,461	46.5	0.038	0.846
		Yes	3	42.9		
Third	All Horses	No	1,810	43.3	2.403	0.121
		Yes	1	14.3		
	Mare	No	353	34.3	2.878	0.090
		Yes				
	Gelding	No	1,454	46.3	2.878	0.090
		Yes	1	14.3		
Win or Place	All Horses	No	2,561	61.3	1.005	0.316

	Yes	3	42.9		
Mare	No	513	49.8		
	Yes				
Gelding	No	2,045	65.1	1.521	0.217
	Yes	3	42.9		

Table A.53: Effect of an Undershot Jaw on Type of Racing Career

Group	Undershot Jaw	NH Only	P2P Only	NH & P2P	Chi-Square	Sig.
All Horses	No	2,228 53.2%	734 17.5%	1,223 29.2%	1.010	0.603
	Yes	5 71.4%	1 14.3%	1 14.3%		
Mare	No	545 53.0%	228 22.2%	256 24.9%		
	Yes					
Gelding	No	1,681 53.3%	504 16.0%	966 30.7%	1.052	0.591
	Yes	5 71.4%	1 14.3%	1 14.3%		

Table A.54: Proportion of Horses without and with an Undershot Jaw that Raced at Various Ages

Variable	Group	Undershot Jaw	n	%	Chi-Square	Sig.
Raced at Age 7 Years	All Horses	No	2,167	51.9	1.522	0.217
		Yes	2	28.6		
	Mare	No	395	38.3	2.191	0.139
		Yes				
	Gelding	No	1,770	56.4	2.080	0.149
		Yes	2	28.6		
Raced at Age 8 Years	All Horses	No	1,504	36.0	1.433	0.231
		Yes	1	14.3		
	Mare	No	210	20.4		
		Yes				
	Gelding	No	1,292	41.1		
		Yes	1	14.3		

Table A.55: Effect of an Undershot Jaw on Racing Performance

Variable	Group	Undershot Jaw	n	Mean \pm S.E.	t-value	Sig.
Age at First Race	All Horses	No	4,176	5.04 \pm 0.013	0.317	0.751
		Yes	7	5.14 \pm 0.404		
	Mares	No	1,030	5.07 \pm 0.025	0.340	0.734
		Yes	0			
	Geldings	No	3,141	5.04 \pm 0.015	0.340	0.734
		Yes	7	5.14 \pm 0.404		
Mean Number of Starts per Year Raced	All Horses	No	4,176	3.48 \pm 0.028	-1.446	0.148
		Yes	7	2.49 \pm 0.418		
	Mares	No	1,030	3.40 \pm 0.059	-1.510	0.131
		Yes	0			
	Geldings	No	3,141	3.51 \pm 0.032	-1.510	0.131
		Yes	7	2.49 \pm 0.418		
Mean Number of National Hunt Starts per Year Raced	All Horses	No	4,176	2.53 \pm 0.032	-0.420	0.674
		Yes	7	2.20 \pm 0.539		
	Mares	No	1,030	2.28 \pm 0.064	-0.528	0.597
		Yes	0			
	Geldings	No	3,141	2.61 \pm 0.036	-0.528	0.597
		Yes	7	2.20 \pm 0.539		
Mean Number of Hurdle Starts per Year Raced	All Horses	No	4,176	1.79 \pm 0.024	-0.132	0.895
		Yes	7	1.71 \pm 0.474		
	Mares	No	1,030	2.01 \pm 0.057	-0.014	0.989
		Yes	0			
	Geldings	No	3,141	1.72 \pm 0.026	-0.014	0.989
		Yes	7	1.71 \pm 0.474		
Mean Number of Chase Starts per Year Raced	All Horses	No	4,176	0.74 \pm 0.019	-0.527	0.598
		Yes	7	0.49 \pm 0.389		
	Mares	No	1,030	0.28 \pm 0.025	-0.794	0.427
		Yes	0			
	Geldings	No	3,141	0.89 \pm 0.024	-0.794	0.427
		Yes	7	0.49 \pm 0.389		
Mean Number of Irish Point-to-Point Starts per Year Raced	All Horses	No	4,176	0.91 \pm 0.021	-1.204	0.229
		Yes	7	0.29 \pm 0.214		
	Mares	No	1,030	1.07 \pm 0.049	-1.169	0.242
		Yes	0			
	Geldings	No	3,141	0.86 \pm 0.023	-1.169	0.242
		Yes	7	0.29 \pm 0.214		
Starts at Age 4 Years	All Horses	No	4,176	0.57 \pm 0.021	0.771	0.470
		Yes	7	1.14 \pm 0.738		
	Mares	No	1,030	0.53 \pm 0.043	0.753	0.480
		Yes	0			
	Geldings	No	3,141	0.59 \pm 0.024	0.753	0.480
		Yes	7	1.14 \pm 0.738		
Starts at Age 6 Years	All Horses	No	4,176	2.95 \pm 0.047	-1.082	0.279
		Yes	7	1.71 \pm 0.606		
	Mares	No	1,030	2.60 \pm 0.093		
		Yes	0			

	Geldings	No	3,141	3.06±0.054	-1.181	0.238
		Yes	7	1.71±0.606		
Starts at Age 7 Years	All Horses	No	4,176	2.22±0.046	-1.082	0.279
		Yes	7	1.00±0.845		
	Mares	No	1,030	1.55±0.083		
		Yes	0			
	Geldings	No	3,141	2.44±0.054	-1.250	0.211
		Yes	7	1.00±0.845		
Starts at Age 8 Years	All Horses	No	4,176	1.59±0.043	-0.964	0.335
		Yes	7	0.57±0.571		
	Mares	No	1,030	0.87±0.068		
		Yes	0			
	Geldings	No	3,141	1.83±0.052	-1.131	0.258
		Yes	7	0.57±0.571		
Mean Proportion of Non- Finished Races per Start	All Horses	No	4,176	26.27±0.440	-0.792	0.428
		Yes	7	17.73±89.028		
	Mares	No	1,030	27.57±0.995		
		Yes	0			
	Geldings	No	3,141	25.85±0.486	-0.787	0.431
		Yes	7	17.74±9.028		
Win Strike Rate	All Horses	No	4,176	6.75±0.181	-0.314	0.753
		Yes	7	5.36±5.357		
	Mares	No	1,030	4.16±0.296		
		Yes	0			
	Geldings	No	3,141	7.59±0.218	-0.484	0.629
		Yes	7	5.36±5.357		
Place Strike Rate	All Horses	No	4,176	13.37±0.253	-0.741	0.459
		Yes	7	8.80±5.557		
	Mares	No	1,030	10.50±0.474		
		Yes	0			
	Geldings	No	3,141	14.31±0.296	-0.880	0.379
		Yes	7	8.80±5.557		
Second Place Strike Rate	All Horses	No	4,176	6.30±0.158	-0.182	0.855
		Yes	7	5.60±3.014		
	Mares	No	1,030	5.09±0.331		
		Yes	0			
	Geldings	No	3,141	6.70±0.180	-0.290	0.772
		Yes	7	5.60±3.014		
Third Place Strike Rate	All Horses	No	4,176	5.95±0.147	-0.858	0.391
		Yes	7	2.86±2.857		
	Mares	No	1,030	5.12±0.289		
		Yes	0			
	Geldings	No	3,141	6.21±0.171	-0.926	0.355
		Yes	7	2.86±2.857		
Overall Strike Rate	All Horses	No	4,176	20.12±0.340	-0.717	0.473
		Yes	7	14.16±8.136		
	Mares	No	1,030	14.66±0.606		
		Yes	0			

	Geldings	No	3,141	21.90 \pm 0.401	-0.910	0.363
		Yes	7	14.16 \pm 8.136		
National Hunt Win Strike Rate	All Horses	No	3,434	5.73 \pm 0.175	0.125	0.901
		Yes	6	6.25 \pm 6.250		
	Mares	No	799	3.27 \pm 0.303		
		Yes	0			
	Geldings	No	2,632	6.47 \pm 0.207	-0.050	0.960
		Yes	6	6.25 \pm 6.250		
National Hunt Place Strike Rate	All Horses	No	3,434	12.26 \pm 0.268	-0.764	0.445
		Yes	6	7.36 \pm 4.085		
	Mares	No	799	9.02 \pm 0.512		
		Yes	0			
	Geldings	No	2,632	13.24 \pm 0.310	-0.903	0.366
		Yes	6	7.36 \pm 4.085		
Irish Point- to-Point Win Strike Rate	All Horses	No	1,953	11.67 \pm 0.514	-0.726	0.468
		Yes	2	0.00 \pm 0.000		
	Mares	No	483	8.64 \pm 0.851		
		Yes	0			
	Geldings	No	1,467	12.66 \pm 0.622	-0.751	0.453
		Yes	2	0.00 \pm 0.000		
Irish Point- to-Point Place Strike Rate	All Horses	No	1,953	15.76 \pm 0.535	0.684	0.618
		Yes	2	50.00 \pm 50.000		
	Mares	No	483	12.78 \pm 0.898		
		Yes	0			
	Geldings	No	1,467	16.77 \pm 0.646	0.664	0.627
		Yes	2	50.00 \pm 50.000		
Mean Earnings per Race	All Horses	No	4,176	442.89 \pm 20.906	0.116	0.907
		Yes	7	502.27 \pm 361.538		
	Mares	No	1,030	218.77 \pm 19.746		
		Yes	0			
	Geldings	No	3,141	516.48 \pm 26.900	-0.025	0.980
		Yes	7	502.27 \pm 361.538		
Wins at Age 4 Years Strike Rate	All Horses	No	968	7.38 \pm 0.669	1.195	0.232
		Yes	2	25.00 \pm 25.000		
	Mares	No	210	3.32 \pm 0.936		
		Yes	0			
	Geldings	No	757	8.48 \pm 0.810	1.046	0.296
		Yes	2	25.00 \pm 25.000		
Places at Age 4 Years Strike Rate	All Horses	No	968	13.99 \pm 0.865	1.234	0.217
		Yes	2	37.50 \pm 12.500		
	Mares	No	210	10.58 \pm 1.550		
		Yes	0			
	Geldings	No	757	14.95 \pm 1.017	1.139	0.255
		Yes	2	37.50 \pm 12.500		
Wins at Age 5 Years Strike Rate	All Horses	No	3,046	7.97 \pm 0.351	0.681	0.545
		Yes	4	25.00 \pm 25.000		
	Mares	No	744	4.58 \pm 0.501		
		Yes	0			

	Geldings	No	2,299	9.07±0.433	0.637	0.569
		Yes	4	25.00±25.000		
Wins at Age 7 Years	All Horses	No	2,167	8.40±0.384	-0.664	0.507
		Yes	2	0.00±0.000		
Strike Rate	Mares	No	395	4.51±0.675		
		Yes	0			
	Geldings	No	1,770	9.24±0.443	-0.701	0.483
		Yes	2	0.00±0.000		
Places at Age 7 Years	All Horses	No	2,167	15.63±0.492	-0.965	0.335
		Yes	2	0.00±0.000		
Strike Rate	Mares	No	395	14.23±1.125		
		Yes	0			
	Geldings	No	1,770	15.91±0.547	-0.978	0.328
		Yes	2	0.00±0.000		
Wins at Age 8 Years	All Horses	No	1,504	8.30±0.474	-0.452	0.652
		Yes	1	0.00		
Strike Rate	Mares	No	210	6.91±1.476		
		Yes	0			
	Geldings	No	1,292	8.49±0.496	-0.476	0.634
		Yes	1	0.00		
Places at Age 8 Years	All Horses	No	1,504	15.51±0.556	0.440	0.660
		Yes	1	25.00		
Strike Rate	Mares	No	210	13.61±1.386		
		Yes	0			
	Geldings	No	1,292	15.79±0.606	0.423	0.673
		Yes	1	25.00		
Wins up to Age 8 Years	All Horses	No	4,176	5.97±0.162	-0.154	0.877
		Yes	7	5.36±5.357		
Strike Rate	Mares	No	1,030	3.99±0.285		
		Yes	0			
	Geldings	No	3,141	6.62±0.193	-0.308	0.758
		Yes	7	5.36±5.357		
Places up to Age 8 Years	All Horses	No	4,176	12.18±0.241	-0.633	0.527
		Yes	7	8.45±5.565		
Strike Rate	Mares	No	1,030	10.08±0.463		
		Yes	0			
	Geldings	No	3,141	12.87±0.281	-0.741	0.459
		Yes	7	8.45±5.565		
Wins up to Age 8 Years	All Horses	No	4,176	0.90±0.024	-0.792	0.429
		Yes	7	0.43±0.429		
	Mares	No	1,030	0.49±0.033		
		Yes	0			
	Geldings	No	3,141	1.03±0.030	-0.947	0.343
		Yes	7	0.43±0.429		

Appendix 23

Effect of Wolf Teeth on Racing Performance

Table A.56: Effect of Wolf Teeth on Racing and Winning Status

Variable	Group	Wolf Teeth	n	%	Chi-Square	Sig.
Raced	All Horses	No	4,311	82.2	0.555	0.456
		Yes	33	86.8		
	Mare	No	1,049	69.3	0.061	0.805
		Yes	8	72.7		
	Gelding	No	3,257	87.4	0.650	0.420
		Yes	25	92.6		
Raced by 4	All Horses	No	962	23.2	0.593	0.441
		Yes	9	29.0		
	Mare	No	207	20.2	2.192	0.139
		Yes	3	42.9		
	Gelding	No	754	24.1	0.010	0.921
		Yes	6	25.0		
Raced by 5	All Horses	No	3,214	77.4	0.736	0.391
		Yes	26	83.9		
	Mare	No	792	77.4	2.038	0.153
		Yes	7	100.0		
	Gelding	No	2,419	77.4	0.041	0.840
		Yes	19	79.2		
Win	All Horses	No	1,685	40.6	0.777	0.378
		Yes	15	48.4		
	Mare	No	291	28.4	0.000	0.994
		Yes	2	28.6		
	Gelding	No	1,392	44.6	0.890	0.346
		Yes	13	54.2		
Placed	All Horses	No	2,335	56.2	0.319	0.572
		Yes	19	61.3		
	Mare	No	464	45.4	0.390	0.533
		Yes	4	57.1		
	Gelding	No	1,868	59.8	0.072	0.788
		Yes	15	62.5		
Second	All Horses	No	1,780	42.9	0.066	0.797
		Yes	14	45.2		
	Mare	No	325	31.8	0.394	0.530
		Yes	3	42.9		
	Gelding	No	1,453	46.5	0.004	0.947
		Yes	11	45.8		
Third	All Horses	No	1,794	43.2	1.695	0.193
		Yes	17	54.8		
	Mare	No	349	34.1	1.637	0.201
		Yes	4	57.1		
	Gelding	No	1,442	46.2	0.614	0.433
		Yes	13	54.2		
Win or Place	All Horses	No	2,545	61.3	0.000	1.000

		Yes	19	61.3		
	Mare	No	509	49.8	0.152	0.697
		Yes	4	57.1		
	Gelding	No	2,033	65.1	0.070	0.792
		Yes	15	62.5		

Table A.57: Effect of Wolf Teeth on Type of Racing Career

Group	Wolf Teeth	NH Only	P2P Only	NH & P2P	Chi-Square	Sig.
All Horses	No	2,210	731	1,219	4.596	0.100
		53.1%	17.6%	29.3%		
	Yes	23	4	5		
		71.9%	12.5%	15.6%		
Mare	No	540	228	254	2.054	0.358
		52.8%	22.3%	24.9%		
	Yes	5	0	2		
		71.4%	0.0%	28.6%		
Gelding	No	1,668	501	964	4.488	0.106
		53.2%	16.0%	30.8%		
	Yes	18	4	3		
		72.0%	16.0%	12.0%		

Table A.58: Proportion of Horses without and with Wolf Teeth that Raced at Various Ages

Variable	Group	Wolf Teeth	n	%	Chi-Square	Sig.
Raced at Age 7 Years	All Horses	No	2,148	51.7	3.158	0.076
		Yes	21	67.7		
	Mare	No	392	38.3	0.061	0.806
		Yes	3	42.9		
	Gelding	No	1,754	56.1	3.441	0.064
		Yes	18	75.0		
Raced at Age 8 Years	All Horses	No	1,491	35.9	1.143	0.285
		Yes	14	45.2		
	Mare	No	207	20.2	2.192	0.139
		Yes	3	42.9		
	Gelding	No	1,282	41.0	0.226	0.634
		Yes	11	45.8		

Table A.59: Effect of Wolf Teeth on Racing Performance

Variable	Group	Wolf Teeth	n	Mean \pm S.E.	t-value	Sig.
Age at First Race	All Horses	No	4,152	5.05 \pm 0.013	-0.528	0.598
		Yes	31	4.97 \pm 0.157		
	Mares	No	1,023	5.07 \pm 0.025	-1.671	0.095
		Yes	7	4.57 \pm 0.202		
	Geldings	No	3,124	5.04 \pm 0.015	0.277	0.782
		Yes	24	5.08 \pm 0.190		
Mean Number of Starts per Year Raced	All Horses	No	4,152	3.48 \pm 0.028	0.007	0.994
		Yes	31	3.49 \pm 0.271		
	Mares	No	1,023	3.40 \pm 0.060	0.035	0.972
		Yes	7	3.42 \pm 0.524		
	Geldings	No	3,124	3.51 \pm 0.032	-0.020	0.984
		Yes	24	3.50 \pm 0.321		
Mean Number of National Hunt Starts per Year Raced	All Horses	No	4,152	2.52 \pm 0.032	1.376	0.169
		Yes	31	3.03 \pm 0.346		
	Mares	No	1,023	2.28 \pm 0.064	0.599	0.549
		Yes	7	2.75 \pm 0.639		
	Geldings	No	3,124	2.60 \pm 0.036	1.222	0.222
		Yes	24	3.11 \pm 0.412		
Mean Number of Hurdle Starts per Year Raced	All Horses	No	4,152	1.79 \pm 0.024	-0.288	0.773
		Yes	31	1.71 \pm 0.299		
	Mares	No	1,023	2.01 \pm 0.057	1.020	0.308
		Yes	7	2.71 \pm 0.658		
	Geldings	No	3,124	1.72 \pm 0.026	-1.013	0.311
		Yes	24	1.42 \pm 0.318		
Starts at Age 4 Years	All Horses	No	4,152	0.57 \pm 0.021	-0.108	0.914
		Yes	31	0.55 \pm 0.185		
	Mares	No	1,023	0.53 \pm 0.043	0.358	0.720
		Yes	7	0.71 \pm 0.421		
	Geldings	No	3,124	0.59 \pm 0.024	-0.326	0.745
		Yes	24	0.50 \pm 0.209		
Starts at Age 5 Years	All Horses	No	4,152	2.46 \pm 0.038	-0.383	0.701
		Yes	31	2.29 \pm 0.348		
	Mares	No	1,023	2.51 \pm 0.080	0.363	0.716
		Yes	7	2.86 \pm 0.508		
	Geldings	No	3,124	2.44 \pm 0.043	-0.643	0.520
		Yes	24	2.13 \pm 0.423		
Starts at Age 6 Years	All Horses	No	4,152	2.94 \pm 0.047	0.802	0.429
		Yes	31	3.52 \pm 0.718		
	Mares	No	1,023	2.60 \pm 0.093	-0.278	0.781
		Yes	7	2.29 \pm 1.539		
	Geldings	No	3,124	3.05 \pm 0.054	1.009	0.324
		Yes	24	3.88 \pm 0.815		
Starts at Age 7 Years	All Horses	No	4,152	2.21 \pm 0.046	1.701	0.089
		Yes	31	3.13 \pm 0.526		
	Mares	No	1,023	1.54 \pm 0.083	1.020	0.347
		Yes	7	3.00 \pm 1.431		

	Geldings	No	3,124	2.44 \pm 0.055	1.169	0.242
		Yes	24	3.17 \pm 0.557		
Starts at Age 8 Years	All Horses	No	4,152	1.59 \pm 0.044	1.069	0.285
		Yes	31	2.13 \pm 0.526		
	Mares	No	1,023	0.87 \pm 0.068	0.676	0.499
		Yes	7	1.43 \pm 0.719		
	Geldings	No	3,124	1.82 \pm 0.053	0.848	0.396
		Yes	24	2.33 \pm 0.647		
Starts up to Age 8 Years	All Horses	No	4,152	9.78 \pm 0.124	1.268	0.205
		Yes	31	11.61 \pm 1.650		
	Mares	No	1,023	8.05 \pm 0.223	0.824	0.410
		Yes	7	10.29 \pm 3.235		
	Geldings	No	3,124	10.35 \pm 0.146	0.984	0.325
		Yes	24	12.00 \pm 1.939		
Mean Proportion of Non-Finished Races per Start	All Horses	No	4,152	26.22 \pm 0.441	0.833	0.405
		Yes	31	30.49 \pm 5.499		
	Mares	No	1,023	27.56 \pm 0.998	0.188	0.851
		Yes	7	29.83 \pm 14.459		
	Geldings	No	3,124	25.79 \pm 0.487	0.878	0.380
		Yes	24	30.69 \pm 5.919		
Win Strike Rate	All Horses	No	4,152	6.74 \pm 0.181	0.526	0.599
		Yes	31	7.85 \pm 2.159		
	Mares	No	1,023	4.18 \pm 0.298	-0.712	0.477
		Yes	7	1.62 \pm 1.092		
	Geldings	No	3,124	7.57 \pm 0.218	0.838	0.402
		Yes	24	9.66 \pm 2.670		
Place Strike Rate	All Horses	No	4,152	13.35 \pm 0.253	0.597	0.550
		Yes	31	15.11 \pm 2.984		
	Mares	No	1,023	10.48 \pm 0.476	0.483	0.629
		Yes	7	13.27 \pm 5.295		
	Geldings	No	3,124	14.29 \pm 0.296	0.401	0.688
		Yes	24	15.65 \pm 3.579		
Second Place Strike Rate	All Horses	No	4,152	6.30 \pm 0.159	0.204	0.838
		Yes	31	6.67 \pm 1.905		
	Mares	No	1,023	5.10 \pm 0.333	-0.339	0.735
		Yes	7	3.73 \pm 1.825		
	Geldings	No	3,124	6.69 \pm 0.180	0.407	0.684
		Yes	24	7.53 \pm 2.391		
Third Place Strike Rate	All Horses	No	4,152	5.94 \pm 0.148	0.350	0.727
		Yes	31	6.54 \pm 1.295		
	Mares	No	1,023	5.10 \pm 0.291	0.640	0.523
		Yes	7	7.36 \pm 3.537		
	Geldings	No	3,124	6.21 \pm 0.172	0.046	0.963
		Yes	24	6.30 \pm 1.365		
Overall Strike Rate	All Horses	No	4,152	20.09 \pm 0.341	0.723	0.470
		Yes	31	22.96 \pm 4.578		
	Mares	No	1,023	14.66 \pm 0.609	0.030	0.976
		Yes	7	14.88 \pm 5.793		

		Geldings	No	3,124	21.86 \pm 0.402	0.612	0.546
			Yes	24	25.31 \pm 5.629		
National Hunt Win Strike Rate	All Horses	No		3,413	5.71 \pm 0.175	1.244	0.213
		Yes		27	8.17 \pm 2.001		
	Mares	No		792	3.29 \pm 0.306	-0.514	0.608
		Yes		7	1.62 \pm 1.092		
	Geldings	No		2,618	6.43 \pm 0.207	1.695	0.090
		Yes		20	10.47 \pm 2.489		
National Hunt Place Strike Rate	All Horses	No		3,413	12.23 \pm 0.269	0.806	0.420
		Yes		27	14.68 \pm 3.021		
	Mares	No		792	9.00 \pm 0.514	0.343	0.732
		Yes		7	10.88 \pm 5.568		
	Geldings	No		2,618	13.20 \pm 0.311	0.784	0.433
		Yes		20	16.00 \pm 3.615		
Irish Point-to- Point Win Strike Rate	All Horses	No		1,946	11.67 \pm 0.516	-0.440	0.660
		Yes		9	8.33 \pm 5.893		
	Mares	No		481	8.68 \pm 0.855	-0.654	0.513
		Yes		2	0.00 \pm 0.000		
	Geldings	No		1,462	12.65 \pm 0.624	-0.214	0.830
		Yes		7	10.71 \pm 7.435		
Irish Point-to- Point Place Strike Rate	All Horses	No		1,946	15.83 \pm 0.538	-0.549	0.583
		Yes		9	11.48 \pm 6.264		
	Mares	No		481	12.79 \pm 0.901	-0.199	0.842
		Yes		2	10.00 \pm 10.000		
	Geldings	No		1,462	16.84 \pm 0.650	-0.525	0.600
		Yes		7	11.90 \pm 7.897		
Mean Earnings per Race	All Horses	No		4,152	440.23 \pm 20.910	1.530	0.126
		Yes		31	812.52 \pm 303.615		
	Mares	No		1,023	219.47 \pm 19.875	-0.430	0.667
		Yes		7	115.99 \pm 64.774		
	Geldings	No		3,124	512.62 \pm 26.891	1.630	0.103
		Yes		24	1,015.67 \pm 383.459		
Wins at Age 5 Years Strike Rate	All Horses	No		3,023	7.92 \pm 0.350	1.338	0.193
		Yes		27	15.96 \pm 6.000		
	Mares	No		737	4.63 \pm 0.505	-0.892	0.373
		Yes		7	0.00 \pm 0.000		
	Geldings	No		2,283	8.99 \pm 0.432	1.617	0.122
		Yes		20	21.55 \pm 7.757		
Places at Age 5 Years Strike Rate	All Horses	No		3,023	13.87 \pm 0.430	0.322	0.748
		Yes		27	15.34 \pm 6.126		
	Mares	No		737	9.62 \pm 0.670	-0.878	0.380
		Yes		7	3.57 \pm 3.571		
	Geldings	No		2,283	15.25 \pm 0.523	0.748	0.455
		Yes		20	19.46 \pm 8.030		
Wins at Age 6 Years Strike Rate	All Horses	No		2,923	8.52 \pm 0.334	0.833	0.405
		Yes		18	12.08 \pm 3.938		
	Mares	No		645	5.79 \pm 0.583	-0.553	0.580
		Yes		2	0.00 \pm 0.000		

	Geldings	No	2,273	9.31+0.395	0.905	0.366
		Yes	16	13.59+4.290		
Wins at Age 7 Years Strike Rate	All Horses	No	2,148	8.40+0.387	-0.175	0.861
		Yes	21	7.71+3.167		
	Mares	No	392	4.52+0.680	-0.045	0.964
		Yes	3	4.17+4.167		
	Geldings	No	1,754	9.24+0.445	-0.212	0.832
		Yes	18	8.30+3.644		
Places at Age 7 Years Strike Rate	All Horses	No	2,148	15.60+0.495	0.231	0.817
		Yes	21	16.76+4.346		
	Mares	No	392	14.13+1.129	0.993	0.322
		Yes	3	26.98+11.528		
	Geldings	No	1,754	15.90+0.550	-0.154	0.877
		Yes	18	15.06+4.704		
Wins at Age 8 Years Strike Rate	All Horses	No	1,491	8.28+0.476	0.240	0.811
		Yes	14	9.46+4.095		
	Mares	No	207	6.89+1.494	0.116	0.908
		Yes	3	8.33+8.333		
	Geldings	No	1,282	8.47+0.498	0.242	0.809
		Yes	11	9.77+4.890		
Places at Age 8 Years Strike Rate	All Horses	No	1,491	15.50+0.558	0.318	0.751
		Yes	14	17.34+5.967		
	Mares	No	207	13.32+1.392	1.722	0.087
		Yes	3	33.33+8.333		
	Geldings	No	1,282	15.82+0.608	-0.432	0.666
		Yes	11	12.98+6.801		
Wins up to Age 8 Years Strike Rate	All Horses	No	4,152	5.97+0.163	0.116	0.908
		Yes	31	6.19+1.656		
	Mares	No	1,023	4.01+0.287	-0.688	0.492
		Yes	7	1.62+1.092		
	Geldings	No	3,124	6.61+0.194	0.411	0.681
		Yes	24	7.52+2.047		
Places up to Age 8 Years Strike Rate	All Horses	No	4,152	12.17+0.242	0.331	0.741
		Yes	31	13.10+2.629		
	Mares	No	1,023	10.06+0.465	0.569	0.569
		Yes	7	13.27+5.295		
	Geldings	No	3,124	12.86+0.282	0.059	0.953
		Yes	24	13.05+3.083		
Wins up to Age 8 Years	All Horses	No	4,152	0.89+0.024	1.256	0.219
		Yes	31	1.35+0.367		
	Mares	No	1,023	0.49+0.033	-0.511	0.610
		Yes	7	0.29+0.184		
	Geldings	No	3,124	1.02+0.030	1.415	0.170
		Yes	24	1.67+0.453		
Places up to Age 8 Years	All Horses	No	4,152	1.72+0.038	1.411	0.168
		Yes	31	2.61+0.630		
	Mares	No	1,023	1.18+0.060	1.311	0.190
		Yes	7	2.14+1.079		

	Geldings	No	3,124	1.90 ± 0.045	1.119	0.274
		Yes	24	2.75 ± 0.760		

Appendix 24

Effect of Ocular Defects on Racing Performance

Table A.60: Effect of Ocular Defects on Racing and Winning Status

Variable	Group	Ocular Defects	n	%	Chi-Square	Sig.
Raced	All Horses	No	4,266	82.2	0.765	0.382
		Yes	78	85.7		
	Mare	No	1,036	69.2	0.926	0.336
		Yes	21	77.8		
	Gelding	No	3,225	87.4	0.150	0.698
		Yes	57	89.1		
Raced by 4	All Horses	No	962	23.4	2.107	0.147
		Yes	12	16.2		
	Mare	No	208	20.6	0.377	0.539
		Yes	3	15.0		
	Gelding	No	753	24.3	1.702	0.192
		Yes	9	16.7		
Raced by 5	All Horses	No	3,201	77.9	7.124	0.008
		Yes	48	64.9		
	Mare	No	783	77.5	0.632	0.427
		Yes	17	85.0		
	Gelding	No	2,415	78.1	13.058	<0.001
		Yes	31	57.4		
Win	All Horses	No	1,673	40.7	0.539	0.463
		Yes	27	36.5		
	Mare	No	286	28.3	0.430	0.512
		Yes	7	35.0		
	Gelding	No	1,385	44.8	1.282	0.257
		Yes	20	37.0		
Placed	All Horses	No	2,311	56.2	0.103	0.748
		Yes	43	58.1		
	Mare	No	459	45.4	0.002	0.968
		Yes	9	45.0		
	Gelding	No	1,849	59.8	0.226	0.634
		Yes	34	63.0		
Second	All Horses	No	1,763	42.9	0.031	0.861
		Yes	31	41.9		
	Mare	No	322	31.9	0.032	0.858
		Yes	6	30.0		
	Gelding	No	1,439	46.5	0.001	0.975
		Yes	25	46.3		
Third	All Horses	No	1,776	43.2	0.492	0.483
		Yes	35	47.3		
	Mare	No	346	34.3	0.005	0.945
		Yes	7	35.0		
	Gelding	No	1,427	46.1	0.701	0.402
		Yes	28	51.9		
Win or Place	All Horses	No	2,517	61.3	0.156	0.683

		Yes	47	63.5		
	Mare	No	501	49.6	0.848	0.357
		Yes	12	60.0		
	Gelding	No	2,013	65.1	0.001	0.970
		Yes	35	64.8		

Table A.61: Effect of Ocular Defects on Type of Racing Career

Group	Ocular Defects	NH Only	P2P Only	NH & P2P	Chi-Square	Sig.
All Horses	No	2,183	724	1,211	6.688	0.035
		53.0%	14.9%	29.4%		
	Yes	50	11	13		
		67.6%	14.9%	17.6%		
Mare	No	535	224	250	0.292	0.864
		53.0%	22.2%	24.8%		
	Yes	10	4	6		
		50.0%	20.0%	30.0%		
Gelding	No	1,646	498	960	10.313	0.006
		53.0%	16.0%	30.9%		
	Yes	40	7	7		
		74.1%	13.0%	13.0%		

Table A.62: Proportion of Horses without and with Ocular Defects that Raced at Various Ages

Variable	Group	Ocular Defect	n	%	Chi-Square	Sig.
Raced at Age 7 Years	All Horses	No	2,126	51.7	1.181	0.277
		Yes	43	58.1		
	Mare	No	387	38.3	0.024	0.878
		Yes	8	40.0		
	Gelding	No	1,737	56.1	1.623	0.203
		Yes	35	64.8		
Raced at Age 8 Years	All Horses	No	1,478	36.0	0.008	0.927
		Yes	27	36.5		
	Mare	No	206	20.4	0.002	0.965
		Yes	4	20.0		
	Gelding	No	1,270	41.0	0.052	0.819
		Yes	23	42.6		

Table A.63: Effect of Ocular Defects on Racing Performance

Variable	Group	Ocular Defect	n	Mean \pm S.E.	t-value	Sig.
Mean Number of National Hunt Starts per Year Raced	All Horses	No	4,109	2.53 \pm 0.032	-0.312	0.755
		Yes	74	2.45 \pm 0.222		
	Mares	No	1,010	2.28 \pm 0.065	-0.119	0.906
		Yes	20	2.23 \pm 0.512		
	Geldings	No	3,094	2.61 \pm 0.036	-0.259	0.796
		Yes	54	2.54 \pm 0.240		
Mean Number of Hurdle Starts per Year Raced	All Horses	No	4,109	1.79 \pm 0.024	-0.498	0.618
		Yes	74	1.70 \pm 0.174		
	Mares	No	1,010	2.02 \pm 0.057	-0.609	0.543
		Yes	20	1.77 \pm 0.495		
	Geldings	No	3,094	1.72 \pm 0.026	-0.218	0.828
		Yes	54	1.68 \pm 0.156		
Mean Number of Chase Starts per Year Raced	All Horses	No	4,109	0.74 \pm 0.020	0.091	0.927
		Yes	74	0.75 \pm 0.131		
	Mares	No	1,010	0.28 \pm 0.025	1.021	0.308
		Yes	20	0.46 \pm 0.234		
	Geldings	No	3,094	0.89 \pm 0.024	-0.165	0.869
		Yes	54	0.86 \pm 0.156		
Starts at Age 5 Years	All Horses	No	4,109	2.46 \pm 0.038	-0.906	0.365
		Yes	74	2.20 \pm 0.342		
	Mares	No	1,010	2.51 \pm 0.080	-0.017	0.986
		Yes	20	2.50 \pm 0.574		
	Geldings	No	3,094	2.45 \pm 0.043	-1.068	0.285
		Yes	54	2.09 \pm 0.420		
Starts at Age 6 Years	All Horses	No	4,109	2.94 \pm 0.047	0.047	0.963
		Yes	74	2.96 \pm 0.350		
	Mares	No	1,010	2.58 \pm 0.093	1.297	0.195
		Yes	20	3.45 \pm 0.829		
	Geldings	No	3,094	3.06 \pm 0.054	-0.688	0.491
		Yes	54	2.78 \pm 0.372		
Starts at Age 7 Years	All Horses	No	4,109	2.22 \pm 0.047	-0.673	0.503
		Yes	74	2.03 \pm 0.289		
	Mares	No	1,010	1.55 \pm 0.084	-0.082	0.934
		Yes	20	1.50 \pm 0.609		
	Geldings	No	3,094	2.44 \pm 0.055	-0.676	0.502
		Yes	54	2.22 \pm 0.324		
Starts up to Age 8 Years	All Horses	No	4,109	9.82 \pm 0.125	-1.494	0.135
		Yes	74	8.42 \pm 0.787		
	Mares	No	1,010	8.06 \pm 0.225	0.022	0.982
		Yes	20	8.10 \pm 1.620		
	Geldings	No	3,094	10.39 \pm 0.148	-1.653	0.098
		Yes	54	8.54 \pm 0.906		
Mean Proportion of Non-Finished Races per Start	All Horses	No	4,109	26.24 \pm 0.443	0.157	0.875
		Yes	74	26.77 \pm 3.553		
	Mares	No	1,010	27.61 \pm 1.004	-0.281	0.779
		Yes	20	25.58 \pm 7.504		

		Geldings	No	3,094	25.80 <u>±</u> 0.489	0.376	0.707
			Yes	54	27.21 <u>±</u> 4.042		
Win Strike Rate	All Horses	No	4,109	6.76 <u>±</u> 0.183	-0.654	0.513	
		Yes	74	5.86 <u>±</u> 1.294			
	Mares	No	1,010	4.15 <u>±</u> 0.300	0.276	0.783	
		Yes	20	4.74 <u>±</u> 1.719			
	Geldings	No	3,094	7.61 <u>±</u> 0.219	-0.793	0.428	
		Yes	54	6.28 <u>±</u> 1.660			
Place Strike Rate	All Horses	No	4,109	13.30 <u>±</u> 0.253	1.531	0.130	
		Yes	74	17.22 <u>±</u> 2.550			
	Mares	No	1,010	10.46 <u>±</u> 0.472	0.577	0.564	
		Yes	20	12.44 <u>±</u> 5.205			
	Geldings	No	3,094	14.22 <u>±</u> 0.296	1.633	0.108	
		Yes	54	18.99 <u>±</u> 2.908			
Second Strike Rate	All Horses	No	4,109	6.28 <u>±</u> 0.158	0.974	0.330	
		Yes	74	7.45 <u>±</u> 1.664			
	Mares	No	1,010	5.03 <u>±</u> 0.323	0.614	0.546	
		Yes	20	8.19 <u>±</u> 5.138			
	Geldings	No	3,094	6.69 <u>±</u> 0.181	0.350	0.726	
		Yes	54	7.17 <u>±</u> 1.310			
Third Strike Rate	All Horses	No	4,109	5.93 <u>±</u> 0.148	0.380	0.704	
		Yes	74	6.36 <u>±</u> 1.155			
	Mares	No	1,010	5.14 <u>±</u> 0.294	-0.558	0.577	
		Yes	20	3.97 <u>±</u> 1.507			
	Geldings	No	3,094	6.19 <u>±</u> 0.172	0.802	0.423	
		Yes	54	7.24 <u>±</u> 1.471			
Overall Strike Rate	All Horses	No	4,109	20.06 <u>±</u> 0.342	1.173	0.241	
		Yes	74	23.09 <u>±</u> 2.907			
	Mares	No	1,010	14.61 <u>±</u> 0.610	0.586	0.558	
		Yes	20	17.18 <u>±</u> 5.242			
	Geldings	No	3,094	21.83 <u>±</u> 0.403	1.117	0.264	
		Yes	54	25.27 <u>±</u> 3.459			
National Win Strike Rate	All Horses	No	3,377	5.74 <u>±</u> 0.176	-0.420	0.675	
		Yes	63	5.19 <u>±</u> 1.348			
	Mares	No	783	3.30 <u>±</u> 0.309	-0.670	0.503	
		Yes	16	1.85 <u>±</u> 0.873			
	Geldings	No	2,591	6.47 <u>±</u> 0.208	-0.091	0.928	
		Yes	47	6.33 <u>±</u> 1.758			
Irish Point-to-Point Win Strike Rate	All Horses	No	1,931	11.57 <u>±</u> 0.514	1.139	0.266	
		Yes	24	18.70 <u>±</u> 6.240			
	Mares	No	473	8.50 <u>±</u> 0.860	1.188	0.236	
		Yes	10	15.60 <u>±</u> 5.887			
	Geldings	No	1,455	12.56 <u>±</u> 0.620	0.834	0.419	
		Yes	14	20.92 <u>±</u> 10.003			
Mean Earnings per Race	All Horses	No	4,109	445.05 <u>±</u> 21.206	-0.735	0.462	
		Yes	74	328.65 <u>±</u> 78.709			
	Mares	No	1,010	220.88 <u>±</u> 20.111	-0.760	0.447	
		Yes	20	112.09 <u>±</u> 46.229			

			Geldings	No	3,094	518.33+27.258	-0.529	0.597
				Yes	54	408.86+104.691		
Wins at Age 4 Years Strike Rate	All Horses	No		958	7.40+0.670	1.154	0.878	
		Yes		12	8.33+8.333			
	Mares	No		207	3.36+0.949	-0.426	0.671	
		Yes		3	0.00+0.000			
	Geldings	No		750	8.49+0.810	0.350	0.727	
		Yes		9	11.11+11.111			
Places at Age 4 Years Strike Rate	All Horses	No		958	13.97+0.865	0.700	0.484	
		Yes		12	19.44+11.205			
	Mares	No		207	10.26+1.510	0.692	0.560	
		Yes		3	33.33+33.333			
	Geldings	No		750	15.01+1.020	-0.021	0.983	
		Yes		9	14.81+11.264			
Wins at Age 5 Years Strike Rate	All Horses	No		3,005	7.96+0.354	0.746	0.456	
		Yes		45	10.14+3.180			
	Mares	No		728	4.62+0.510	-0.432	0.666	
		Yes		16	3.13+2.266			
	Geldings	No		2,274	9.03+0.436	1.278	0.201	
		Yes		29	14.01+4.652			
Places at Age 5 Years Strike Rate	All Horses	No		3,005	13.83+0.431	0.772	0.444	
		Yes		45	17.19+4.321			
	Mares	No		728	9.58+0.666	-0.120	0.905	
		Yes		16	9.03+6.433			
	Geldings	No		2,274	15.20+0.525	1.382	0.167	
		Yes		29	21.69+5.591			
Wins at Age 6 Years Strike Rate	All Horses	No		2,886	8.59+0.336	-1.118	0.264	
		Yes		55	5.84+2.379			
	Mares	No		634	5.82+0.591	-0.475	0.635	
		Yes		13	3.85+2.186			
	Geldings	No		2,247	9.39+0.397	-1.000	0.318	
		Yes		42	6.46+3.048			
Places at Age 6 Years Strike Rate	All Horses	No		2,886	15.13+0.418	0.518	0.604	
		Yes		55	16.72+3.187			
	Mares	No		634	12.59+0.832	-0.962	0.336	
		Yes		13	6.99+2.658			
	Geldings	No		2,247	15.81+0.480	1.103	0.270	
		Yes		42	19.73+3.992			
Wins at Age 7 Years Strike Rate	All Horses	No		2,126	8.42+0.389	-0.412	0.680	
		Yes		43	7.28+2.184			
	Mares	No		387	4.41+0.683	1.087	0.278	
		Yes		8	9.62+4.332			
	Geldings	No		1,737	9.28+0.448	-0.797	0.426	
		Yes		35	6.75+2.512			
Places at Age 7 Years Strike Rate	All Horses	No		2,126	15.46+0.492	1.637	0.109	
		Yes		43	23.07+4.619			
	Mares	No		387	13.82+1.097	1.288	0.238	
		Yes		8	34.03+15.659			

	Geldings	No	1,737	15.80 \pm 0.550	1.213	0.225
		Yes	35	20.56 \pm 4.455		
Places at Age 8 Years Strike Rate	All Horses	No	1,478	15.54 \pm 0.561	-0.373	0.709
		Yes	27	13.98 \pm 3.887		
	Mares	No	206	13.47 \pm 1.395	0.726	0.469
		Yes	4	20.83 \pm 12.500		
	Geldings	No	1,270	15.85 \pm 0.612	-0.669	0.504
		Yes	23	12.79 \pm 4.101		
Wins up to Age 8 Years Strike Rate	All Horses	No	4,109	5.98 \pm 0.164	-0.363	0.717
		Yes	74	5.53 \pm 1.237		
	Mares	No	1,010	3.97 \pm 0.289	0.372	0.710
		Yes	20	4.74 \pm 1.719		
	Geldings	No	3,094	6.63 \pm 0.195	-0.544	0.587
		Yes	54	5.82 \pm 1.577		
Wins up to Age 8 Years	All Horses	No	4,109	0.90 \pm 0.024	-0.925	0.355
		Yes	74	0.73 \pm 0.167		
	Mares	No	1,010	0.49 \pm 0.033	0.485	0.628
		Yes	20	0.60 \pm 0.234		
	Geldings	No	3,094	1.03 \pm 0.030	-1.109	0.267
		Yes	54	0.78 \pm 0.213		
Places up to Age 8 Years	All Horses	No	4,109	1.73 \pm 0.038	-0.140	0.889
		Yes	74	1.69 \pm 0.260		
	Mares	No	1,010	1.19 \pm 0.061	-0.201	0.841
		Yes	20	1.10 \pm 0.452		
	Geldings	No	3,094	1.90 \pm 0.046	0.008	0.994
		Yes	54	1.91 \pm 0.312		

Appendix 25

Effect of Muscle Wastage on Racing Performance

Table A.64: Effect of Muscle Wastage on Racing and Winning Status

Variable	Group	Muscle Wastage	n	%	Chi-Square	Sig.
Raced	All Horses	No	4,305	82.2	0.018	0.894
		Yes	39	83.0		
	Mare	No	1,039	69.1	1.641	0.200
		Yes	18	81.8		
	Gelding	No	3,261	87.5	0.277	0.599
		Yes	21	84.0		
Raced by 4	All Horses	No	966	23.3	2.385	0.122
		Yes	5	12.8		
	Mare	No	208	20.6	0.971	0.324
		Yes	2	11.1		
	Gelding	No	757	24.2	1.122	0.290
		Yes	3	14.3		
Raced by 5	All Horses	No	3,215	77.6	4.020	0.045
		Yes	25	64.1		
	Mare	No	787	77.8	1.253	0.263
		Yes	12	66.7		
	Gelding	No	2,425	77.6	2.923	0.087
		Yes	13	61.9		
Win	All Horses	No	1,685	40.7	0.077	0.781
		Yes	15	38.5		
	Mare	No	284	28.1	4.181	0.041
		Yes	9	50.0		
	Gelding	No	1,399	44.7	2.207	0.137
		Yes	6	28.6		
Placed	All Horses	No	2,332	56.3	0.000	0.986
		Yes	22	56.4		
	Mare	No	458	45.3	0.757	0.384
		Yes	10	55.6		
	Gelding	No	1,871	59.8	0.063	0.802
		Yes	12	57.1		
Second	All Horses	No	1,781	43.0	1.467	0.226
		Yes	13	33.3		
	Mare	No	323	31.9	0.140	0.709
		Yes	5	27.8		
	Gelding	No	1,456	46.6	0.601	0.438
		Yes	8	38.1		
Third	All Horses	No	1,793	43.3	0.131	0.717
		Yes	18	46.2		
	Mare	No	344	34.0	2.012	0.156
		Yes	9	50.0		
	Gelding	No	1,446	46.2	0.096	0.756
		Yes	9	42.9		
Win or Place	All Horses	No	2,539	61.3	0.131	0.718

	Yes	25	64.1		
Mare	No	502	49.6	0.937	0.333
	Yes	11	61.1		
Gelding	No	2,034	65.0	0.024	0.877
	Yes	14	66.7		

Table A.65: Effect of Muscle Wastage on Type of Racing Career

Group	Muscle Wastage	NH Only	P2P Only	NH & P2P	Chi-Square	Sig.
All Horses	No	2,216	728	1,209	1.853	0.396
		53.4%	17.5%	29.1%		
	Yes	17	7	15		
		43.6%	17.9%	38.5%		
Mare	No	537	224	250	0.778	0.678
		53.1%	22.2%	24.7%		
	Yes	8	4	6		
		44.4%	22.2%	33.3%		
Gelding	No	1,677	502	958	1.511	0.470
		53.5%	16.0%	30.5%		
	Yes	9	3	9		
		42.9%	14.3%	42.9%		

Table A.66: Proportion of Horses without and with Muscle Wastage that Raced at Various Ages

Variable	Group	Muscle Wastage	n	%	Chi-Square	Sig.
Raced at Age 7 Years	All Horses	No	2,150	51.9	0.155	0.694
		Yes	19	48.7		
	Mare	No	387	38.2	0.288	0.592
		Yes	8	44.4		
	Gelding	No	1,761	56.3	0.131	0.717
		Yes	11	52.4		
Raced at Age 8 Years	All Horses	No	1,496	36.1	2.845	0.092
		Yes	9	23.1		
	Mare	No	208	20.6	0.971	0.324
		Yes	2	11.1		
	Gelding	No	1,286	41.1	0.523	0.469
		Yes	7	33.3		

Table A.67: Effect of Muscle Wastage on Racing Performance

Variable	Group	Muscle Wastage	n	Mean \pm S.E.	t-value	Sig.
Age at First Race	All Horses	No	4,144	5.04 \pm 0.013	1.426	0.154
		Yes	39	5.23 \pm 0.124		
	Mares	No	1,012	5.07 \pm 0.025	0.829	0.407
		Yes	18	5.22 \pm 0.152		
	Geldings	No	3,127	5.04 \pm 0.015	1.120	0.263
		Yes	21	5.24 \pm 0.194		
Mean Number of Starts per Year Raced	All Horses	No	4,144	3.48 \pm 0.028	0.324	0.746
		Yes	39	3.58 \pm 0.294		
	Mares	No	1,012	3.39 \pm 0.060	1.490	0.137
		Yes	18	4.06 \pm 0.534		
	Geldings	No	3,127	3.51 \pm 0.032	-0.891	0.373
		Yes	21	3.16 \pm 0.283		
Mean Number of National Hunt Starts per Year Raced	All Horses	No	4,144	2.53 \pm 0.032	-0.460	0.645
		Yes	39	2.38 \pm 0.333		
	Mares	No	1,012	2.27 \pm 0.064	0.889	0.374
		Yes	18	2.71 \pm 0.605		
	Geldings	No	3,127	2.61 \pm 0.036	-1.169	0.242
		Yes	21	2.09 \pm 0.340		
Mean Number of Hurdle Starts per Year Raced	All Horses	No	4,144	1.79 \pm 0.024	0.712	0.481
		Yes	39	2.02 \pm 0.315		
	Mares	No	1,012	2.00 \pm 0.057	0.857	0.392
		Yes	18	2.38 \pm 0.572		
	Geldings	No	3,127	1.72 \pm 0.026	-0.049	0.961
		Yes	21	1.71 \pm 0.319		
Mean Number of Irish Point-to-Point Starts per Year Raced	All Horses	No	4,144	0.91 \pm 0.021	1.320	0.187
		Yes	39	1.20 \pm 0.243		
	Mares	No	1,012	1.07 \pm 0.050	0.763	0.445
		Yes	18	1.35 \pm 0.431		
	Geldings	No	3,127	0.86 \pm 0.023	0.754	0.451
		Yes	21	1.07 \pm 0.265		
Starts at Age 5 Years	All Horses	No	4,144	2.46 \pm 0.038	-1.175	0.240
		Yes	39	2.00 \pm 0.375		
	Mares	No	1,012	2.51 \pm 0.080	-0.110	0.912
		Yes	18	2.44 \pm 0.677		
	Geldings	No	3,127	2.45 \pm 0.043	-1.563	0.118
		Yes	21	1.62 \pm 0.381		
Starts at Age 6 Years	All Horses	No	4,144	2.94 \pm 0.047	0.172	0.864
		Yes	39	3.03 \pm 0.432		
	Mares	No	1,012	2.58 \pm 0.093	1.622	0.105
		Yes	18	3.72 \pm 0.699		
	Geldings	No	3,127	3.06 \pm 0.054	-0.960	0.337
		Yes	21	2.43 \pm 0.514		
Starts at Age 7 Years	All Horses	No	4,144	2.22 \pm 0.046	-0.463	0.643
		Yes	39	2.00 \pm 0.460		
	Mares	No	1,012	1.54 \pm 0.084	0.636	0.525
		Yes	18	1.94 \pm 0.674		

		Geldings	No	3,127	2.44 \pm 0.055	-0.592	0.554
			Yes	21	2.05 \pm 0.645		
Mean		All Horses	No	4,144	26.26 \pm 0.442	-0.105	0.917
Proportion of			Yes	39	25.78 \pm 4.558		
Non-Finished		Mares	No	1,012	27.58 \pm 1.005	-0.065	0.948
			Yes	18	27.08 \pm 7.119		
Races per Start		Geldings	No	3,127	25.84 \pm 0.487	-0.198	0.843
			Yes	21	24.66 \pm 6.020		
Win Rate	Strike	All Horses	No	4,144	6.76 \pm 0.182	-0.599	0.549
			Yes	39	5.63 \pm 1.646		
		Mares	No	1,012	4.12 \pm 0.298	1.068	0.286
			Yes	18	6.53 \pm 2.369		
		Geldings	No	3,127	7.60 \pm 0.218	-1.029	0.304
			Yes	21	4.85 \pm 2.324		
Place Rate	Strike	All Horses	No	4,144	13.36 \pm 0.254	0.083	0.933
			Yes	39	13.58 \pm 2.438		
		Mares	No	1,012	10.47 \pm 0.479	0.452	0.652
			Yes	18	12.10 \pm 3.222		
		Geldings	No	3,127	14.30 \pm 0.296	0.154	0.878
			Yes	21	14.85 \pm 3.637		
Second Place Strike Rate		All Horses	No	4,144	6.32 \pm 0.159	-1.260	0.208
			Yes	39	4.25 \pm 1.165		
		Mares	No	1,012	5.12 \pm 0.336	-0.605	0.545
			Yes	18	3.58 \pm 1.568		
		Geldings	No	3,127	6.71 \pm 0.180	-0.861	0.389
			Yes	21	4.81 \pm 1.722		
Third Place Strike Rate		All Horses	No	4,144	5.92 \pm 0.147	1.110	0.274
			Yes	39	8.13 \pm 1.983		
		Mares	No	1,012	5.08 \pm 0.291	1.110	0.267
			Yes	18	7.53 \pm 2.453		
		Geldings	No	3,127	6.19 \pm 0.171	0.796	0.435
			Yes	21	8.64 \pm 3.077		
Overall Strike Rate		All Horses	No	4,144	20.12 \pm 0.342	-0.257	0.798
			Yes	39	19.21 \pm 3.204		
		Mares	No	1,012	14.59 \pm 0.611	0.874	0.382
			Yes	18	18.63 \pm 4.721		
		Geldings	No	3,127	21.90 \pm 0.402	-0.445	0.657
			Yes	21	19.71 \pm 4.468		
National Hunt Place Strike Rate		All Horses	No	3,408	12.26 \pm 0.269	-0.279	0.780
			Yes	32	11.48 \pm 3.081		
		Mares	No	785	9.07 \pm 0.520	-0.697	0.486
			Yes	14	6.34 \pm 2.230		
		Geldings	No	2,620	13.21 \pm 0.310	0.602	0.547
			Yes	18	15.49 \pm 5.067		
Irish Point-to-Point Win Strike Rate		All Horses	No	1,933	11.67 \pm 0.519	-0.301	0.763
			Yes	22	10.21 \pm 2.900		
		Mares	No	473	8.61 \pm 0.865	0.264	0.792
			Yes	10	10.19 \pm 4.264		

	Geldings	No	1,457	12.66 \pm 0.626	-0.353	0.724
		Yes	12	10.22 \pm 4.128		
Irish Point-to-Point Place Strike Rate	All Horses	No	1,933	15.76 \pm 0.539	0.913	0.361
		Yes	22	20.40 \pm 5.218		
	Mares	No	473	12.56 \pm 0.897	1.662	0.097
		Yes	10	23.02 \pm 8.907		
	Geldings	No	1,457	16.81 \pm 0.651	0.196	0.845
		Yes	12	18.22 \pm 6.345		
	All Horses	No	4,144	445.17 \pm 21.064	-1.076	0.282
		Yes	39	211.32 \pm 64.122		
Mean Earnings per Race	Mares	No	1,012	217.54 \pm 19.988	0.467	0.641
		Yes	18	287.91 \pm 119.405		
	Geldings	No	3,127	518.94 \pm 27.023	-1.132	0.258
		Yes	21	145.68 \pm 60.448		
Wins at Age 4 Years Strike Rate	All Horses	No	965	7.45 \pm 0.672	-0.798	0.425
		Yes	5	0.00 \pm 0.000		
	Mares	No	208	3.35 \pm 0.945	-0.347	0.729
		Yes	2	0.00 \pm 0.000		
	Geldings	No	756	8.56 \pm 0.813	-0.663	0.508
		Yes	3	0.00 \pm 0.000		
	All Horses	No	965	14.05 \pm 0.868	-0.197	0.844
		Yes	5	11.67 \pm 7.265		
Places at Age 4 Years Strike Rate	Mares	No	208	10.57 \pm 1.563	0.121	0.904
		Yes	2	12.50 \pm 12.500		
	Geldings	No	756	15.03 \pm 1.019	-0.242	0.809
		Yes	3	11.11 \pm 1.111		
Wins at Age 5 Years Strike Rate	All Horses	No	3,027	7.97 \pm 0.352	0.848	0.397
		Yes	23	11.41 \pm 4.673		
	Mares	No	733	4.40 \pm 0.488	1.398	0.192
		Yes	11	17.05 \pm 9.032		
	Geldings	No	2,291	9.11 \pm 0.436	-0.474	0.635
		Yes	12	6.25 \pm 3.264		
	All Horses	No	2,911	15.15 \pm 0.416	0.190	0.850
		Yes	30	15.94 \pm 4.502		
Places at Age 6 Years Strike Rate	Mares	No	632	12.53 \pm 0.831	-0.380	0.704
		Yes	15	10.46 \pm 4.082		
	Geldings	No	2,274	15.85 \pm 0.477	0.941	0.347
		Yes	15	21.41 \pm 7.940		
Wins at Age 7 Years Strike Rate	All Horses	No	2,150	8.39 \pm 0.386	0.099	0.921
		Yes	19	8.80 \pm 4.290		
	Mares	No	387	4.43 \pm 0.677	0.902	0.368
		Yes	8	8.75 \pm 6.391		
	Geldings	No	1,761	9.23 \pm 0.444	-0.071	0.943
		Yes	11	8.83 \pm 6.036		
Wins at Age 8 Years Strike Rate	All Horses	No	1,496	8.31 \pm 0.476	-0.383	0.701
		Yes	9	5.95 \pm 3.948		
	Mares	No	208	6.86 \pm 1.487	0.371	0.711
		Yes	2	12.50 \pm 12.500		

	Geldings	No	1,286	8.50 \pm 0.497	-0.655	0.513
		Yes	7	4.08 \pm 4.082		
Places at Age 8 Years	All Horses	No	1,496	15.48 \pm 0.557	0.798	0.425
		Yes	9	21.23 \pm 7.256		
Strike Rate	Mares	No	208	13.44 \pm 1.393	1.250	0.213
		Yes	2	31.25 \pm 6.250		
	Geldings	No	1,286	15.78 \pm 0.607	0.313	0.754
		Yes	7	18.37 \pm 9.070		
Wins up to Age 8 Years	All Horses	No	4,144	5.98 \pm 0.163	-0.647	0.518
		Yes	39	4.89 \pm 1.324		
Strike Rate	Mares	No	1,012	3.94 \pm 0.287	1.188	0.235
		Yes	18	6.53 \pm 2.369		
	Geldings	No	3,127	6.64 \pm 0.194	-1.333	0.182
		Yes	21	3.47 \pm 1.371		
Places up to Age 8 Years	All Horses	No	4,144	12.18 \pm 0.242	-0.065	0.948
		Yes	39	12.01 \pm 2.383		
Strike Rate	Mares	No	1,012	10.05 \pm 0.468	0.423	0.673
		Yes	18	11.55 \pm 3.223		
	Geldings	No	3,127	12.86 \pm 0.282	-0.129	0.897
		Yes	21	12.42 \pm 3.530		
Wins up to Age 8 Years	All Horses	No	4,144	0.90 \pm 0.024	-1.024	0.306
		Yes	39	0.64 \pm 0.185		
	Mares	No	1,012	0.48 \pm 0.033	0.959	0.338
		Yes	18	0.72 \pm 0.266		
	Geldings	No	3,127	1.03 \pm 0.030	-1.253	0.210
		Yes	21	0.57 \pm 0.263		

Appendix 26

Effect of Unspecified Synovial Distension on Racing Performance

Table A.68: Effect of Unspecified Synovial Distension on Racing and Winning Status

Variable	Group	Unspecified Synovial Distension	n	%	Chi-Square	Sig.
Raced	All Horses	No	4,316	82.2	0.155	0.694
		Yes	28	84.8		
	Mare	No	1,049	69.2	0.541	0.462
		Yes	8	80.0		
	Gelding	No	3,262	87.5	0.006	0.940
		Yes	20	87.0		
Raced by 4	All Horses	No	967	23.3	1.260	0.262
		Yes	4	14.3		
	Mare	No	209	20.5	0.309	0.578
		Yes	1	12.5		
	Gelding	No	757	24.2	0.919	0.338
		Yes	3	15.0		
Raced by 5	All Horses	No	3,221	77.5	1.488	0.223
		Yes	19	67.9		
	Mare	No	792	77.5	0.457	0.499
		Yes	7	87.5		
	Gelding	No	2,426	77.6	3.507	0.061
		Yes	12	60.0		
Win	All Horses	No	1,690	40.7	0.284	0.594
		Yes	10	35.7		
	Mare	No	291	28.5	0.047	0.828
		Yes	2	25.0		
	Gelding	No	1,397	44.7	0.175	0.676
		Yes	8	40.0		
Placed	All Horses	No	2,341	56.3	1.111	0.292
		Yes	13	46.4		
	Mare	No	464	45.4	0.068	0.795
		Yes	4	50.0		
	Gelding	No	1,874	59.9	1.838	0.175
		Yes	9	45.0		
Second	All Horses	No	1,784	42.9	0.592	0.442
		Yes	10	35.7		
	Mare	No	326	31.9	0.174	0.677
		Yes	2	25.0		
	Gelding	No	1,456	46.5	0.342	0.558
		Yes	8	40.0		
Third	All Horses	No	1,802	43.4	1.428	0.232
		Yes	9	32.1		
	Mare	No	350	34.2	0.037	0.847
		Yes	3	37.5		
	Gelding	No	1,449	46.3	2.130	0.144
		Yes	6	30.0		

Win Place	or	All Horses	No	2,550	61.4	1.516	0.218
			Yes	14	50.0		
		Mare	No	509	49.8	0.000	0.991
			Yes	4	50.0		
		Gelding	No	2,038	65.2	2.007	0.157
			Yes	10	50.0		

Table A.69: Effect of Unspecified Synovial Distension on Type of Racing Career

Group	Unspecified Synovial Distension	NH Only	P2P Only	NH & P2P	Chi-Square	Sig.
All Horses	No	2,220	728	1,216	1.148	0.563
		53.3%	17.5%	29.2%		
	Yes	13	7	8		
		46.4%	25.0%	28.6%		
Mare	No	542	224	255	3.681	0.159
		53.1%	21.9%	25.0%		
	Yes	3	4	1		
		37.5%	50.0%	12.5%		
Gelding	No	1,676	502	960	0.182	0.913
		53.4%	16.0%	30.6%		
	Yes	10	3	7		
		50.0%	15.0%	35.0%		

Table A.70: Proportion of Horses without and with Unspecified Synovial Distension of Sale that Raced at Various Ages

Variable	Group	Unspecified Synovial Distension	n	%	Chi-Square	Sig.
Raced at Age 7 Years	All Horses	No	2,157	51.9	0.914	0.339
		Yes	12	42.9		
	Mare	No	393	38.5	0.608	0.436
		Yes	2	25.0		
	Gelding	No	1,762	56.3	0.324	0.569
		Yes	10	50.0		
Raced at Age 8 Years	All Horses	No	1,499	36.1	2.591	0.107
		Yes	6	21.4		
	Mare	No	209	20.5	0.309	0.578
		Yes	1	12.5		
	Gelding	No	1,288	41.2	2.149	0.143
		Yes	5	25.0		

Table A.71: Effect of Unspecified Synovial Distension on Racing Performance

Variable	Group	Unspecified Synovial Distension	n	Mean \pm S.E.	t-value	Sig.
Age at First Race	All Horses	No	4,155	5.04 \pm 0.013	0.868	0.386
		Yes	28	5.18 \pm 0.127		
	Mares	No	1,022	5.07 \pm 0.025	-0.247	0.805
		Yes	8	5.00 \pm 0.189		
	Geldings	No	3,128	5.04 \pm 0.015	1.158	0.247
		Yes	20	5.25 \pm 0.160		
Mean Number of Starts per Year Raced	All Horses	No	4,155	3.49 \pm 0.028	-1.666	0.096
		Yes	28	2.91 \pm 0.288		
	Mares	No	1,022	3.40 \pm 0.059	-0.968	0.333
		Yes	8	2.75 \pm 0.701		
	Geldings	No	3,128	3.51 \pm 0.032	-1.336	0.182
		Yes	20	2.98 \pm 0.303		
Mean Number of National Hunt Starts per Year Raced	All Horses	No	4,155	2.53 \pm 0.032	-1.814	0.070
		Yes	28	1.83 \pm 0.287		
	Mares	No	1,022	2.29 \pm 0.064	-1.643	0.101
		Yes	8	1.09 \pm 0.463		
	Geldings	No	3,128	2.61 \pm 0.036	-1.068	0.286
		Yes	20	2.12 \pm 0.340		
Mean Number of Hurdle Starts per Year Raced	All Horses	No	4,155	1.80 \pm 0.024	-1.736	0.083
		Yes	28	1.28 \pm 0.221		
	Mares	No	1,022	2.02 \pm 0.057	-1.577	0.115
		Yes	8	1.00 \pm 0.423		
	Geldings	No	3,128	1.72 \pm 0.026	-1.009	0.313
		Yes	20	1.39 \pm 0.263		
Mean Number of Chase Starts per Year Raced	All Horses	No	4,155	0.74 \pm 0.019	-0.796	0.426
		Yes	28	0.55 \pm 0.206		
	Mares	No	1,022	0.28 \pm 0.025	-0.649	0.516
		Yes	8	0.09 \pm 0.094		
	Geldings	No	3,128	0.89 \pm 0.024	0.520	0.603
		Yes	20	0.73 \pm 0.277		
Mean Number of Irish Point-to-Point Starts per Year Raced	All Horses	No	4,155	0.91 \pm 0.021	0.656	0.512
		Yes	28	1.08 \pm 0.287		
	Mares	No	1,022	1.07 \pm 0.049	1.054	0.292
		Yes	8	1.66 \pm 0.820		
	Geldings	No	3,128	0.86 \pm 0.023	-0.024	0.981
		Yes	20	0.85 \pm 0.235		
Starts at Age 4 Years	All Horses	No	4,155	0.58 \pm 0.021	-0.576	0.565
		Yes	28	0.43 \pm 0.221		
	Mares	No	1,022	0.53 \pm 0.043	-0.063	0.950
		Yes	8	0.50 \pm 0.500		
	Geldings	No	3,128	0.59 \pm 0.024	-0.633	0.527
		Yes	20	0.40 \pm 0.245		
Starts at Age 6 Years	All Horses	No	4,155	2.94 \pm 0.047	-0.089	0.929
		Yes	28	2.89 \pm 0.576		

	Mares	No	1,022	2.61 \pm 0.093	-1.049	0.295
		Yes	8	1.50 \pm 1.225		
	Geldings	No	3,128	3.06 \pm 0.054	0.585	0.559
		Yes	20	3.45 \pm 0.618		
Starts up to Age 8 Years	All Horses	No	4,155	9.81 \pm 0.124	-1.690	0.091
		Yes	28	7.25 \pm 1.118		
	Mares	No	1,022	8.08 \pm 0.224	-0.870	0.385
		Yes	8	5.88 \pm 2.083		
	Geldings	No	3,128	10.38 \pm 0.147	-1.405	0.160
		Yes	20	7.80 \pm 1.339		
Mean Proportion of Non- Finished Races per Start	All Horses	No	4,155	26.18 \pm 0.440	1.616	0.118
		Yes	28	37.34 \pm 6.895		
	Mares	No	1,022	27.46 \pm 0.995	1.260	0.208
		Yes	8	41.74 \pm 15.709		
	Geldings	No	3,128	25.77 \pm 0.486	1.609	0.108
		Yes	20	35.58 \pm 7.592		
Win Strike Rate	All Horses	No	4,155	6.76 \pm 0.182	-0.673	0.501
		Yes	28	5.26 \pm 1.612		
	Mares	No	1,022	4.16 \pm 0.297	0.019	0.985
		Yes	8	4.23 \pm 3.325		
	Geldings	No	3,128	7.60 \pm 0.219	-0.700	0.484
		Yes	20	5.68 \pm 1.873		
Place Strike Rate	All Horses	No	4,155	13.36 \pm 0.253	0.370	0.711
		Yes	28	14.51 \pm 3.503		
	Mares	No	1,022	10.44 \pm 0.473	0.875	0.411
		Yes	8	17.56 \pm 8.123		
	Geldings	No	3,128	14.31 \pm 0.296	-0.275	0.783
		Yes	20	13.28 \pm 3.796		
Second Place Strike Rate	All Horses	No	4,155	6.29 \pm 0.158	0.773	0.439
		Yes	28	7.79 \pm 2.392		
	Mares	No	1,022	5.06 \pm 0.330	0.555	0.596
		Yes	8	8.59 \pm 6.354		
	Geldings	No	3,128	6.69 \pm 0.180	0.343	0.731
		Yes	20	7.47 \pm 2.328		
Third Place Strike Rate	All Horses	No	4,155	5.94 \pm 0.148	-0.348	0.728
		Yes	28	5.32 \pm 2.033		
	Mares	No	1,022	5.09 \pm 0.288	0.589	0.574
		Yes	8	8.71 \pm 6.125		
	Geldings	No	3,128	6.22 \pm 0.172	-1.051	0.293
		Yes	20	3.96 \pm 1.535		
Overall Strike Rate	All Horses	No	4,155	20.11 \pm 0.341	-0.083	0.934
		Yes	28	19.77 \pm 4.365		
	Mares	No	1,022	14.60 \pm 0.606	0.758	0.473
		Yes	8	21.79 \pm 9.456		
	Geldings	No	3,128	21.90 \pm 0.402	-0.583	0.560
		Yes	20	18.96 \pm 4.961		
National Hunt Win	All Horses	No	3,419	5.73 \pm 0.176	-0.537	0.591
		Yes	21	4.53 \pm 1.953		

Strike Rate	Mares	No	795	3.26 \pm 0.303	0.829	0.408
		Yes	4	6.82 \pm 6.818		
	Geldings	No	2,621	6.48 \pm 0.207	-0.965	0.334
		Yes	17	3.99 \pm 1.935		
Irish Point-to-Point Win Strike Rate	All Horses	No	1,940	11.69 \pm 0.518	-0.791	0.429
		Yes	15	7.03 \pm 2.478		
	Mares	No	478	8.68 \pm 0.859	-0.386	0.700
		Yes	5	5.43 \pm 3.897		
	Geldings	No	1,459	12.67 \pm 0.625	-0.640	0.522
		Yes	10	7.83 \pm 3.278		
Irish Point-to-Point Place Strike Rate	All Horses	No	1,940	15.84 \pm 0.539	-0.656	0.512
		Yes	15	11.81 \pm 5.527		
	Mares	No	478	12.85 \pm 0.906	-0.836	0.403
		Yes	5	5.43 \pm 3.897		
	Geldings	No	1,459	16.83 \pm 0.650	-0.232	0.816
		Yes	10	15.00 \pm 8.032		
Mean Earnings per Race	All Horses	No	4,155	443.66 \pm 21.004	-0.392	0.695
		Yes	28	343.28 \pm 117.540		
	Mares	No	1,022	217.76 \pm 19.800	0.579	0.563
		Yes	8	347.98 \pm 268.511		
	Geldings	No	3,128	517.57 \pm 27.009	-0.521	0.602
		Yes	20	341.40 \pm 129.847		
Wins at Age 4 Years Strike Rate	All Horses	No	966	7.41 \pm 0.671	0.088	0.930
		Yes	4	8.33 \pm 8.333		
	Mares	No	209	3.33 \pm 0.940	-0.245	0.807
		Yes	1	0.00		
	Geldings	No	756	8.51 \pm 0.812	0.201	0.841
		Yes	3	11.11 \pm 11.111		
Places at Age 4 Years Strike Rate	All Horses	No	966	14.06 \pm 0.867	-0.424	0.671
		Yes	4	8.33 \pm 8.333		
	Mares	No	209	10.64 \pm 1.557	-0.471	0.638
		Yes	1	0.00		
	Geldings	No	756	15.03 \pm 1.019	-0.242	0.809
		Yes	3	11.11 \pm 1.111		
Wins at Age 5 Years Strike Rate	All Horses	No	3,031	8.01 \pm 0.353	-0.664	0.507
		Yes	19	5.04 \pm 3.099		
	Mares	No	737	4.61 \pm 0.505	-0.544	0.586
		Yes	7	1.79 \pm 1.786		
	Geldings	No	2,291	9.11 \pm 0.436	-0.358	0.720
		Yes	12	6.94 \pm 4.793		
Places at Age 5 Years Strike Rate	All Horses	No	3,031	13.88 \pm 0.430	0.036	0.971
		Yes	19	14.08 \pm 6.954		
	Mares	No	737	9.40 \pm 0.656	1.194	0.277
		Yes	7	26.79 \pm 14.544		
	Geldings	No	2,291	15.33 \pm 0.525	-1.192	0.234
		Yes	12	6.67 \pm 6.667		
Wins at Age 6 Years	All Horses	No	2,921	8.57 \pm 0.335	-1.721	0.101
		Yes	20	4.11 \pm 2.570		

Strike Rate	Mares	No	644	5.79±0.584	-0.287	0.774
		Yes	3	3.33±3.333		
	Geldings	No	2,272	9.38±0.396	-1.119	0.263
		Yes	17	4.25±2.995		
Places at Age 6 Years	All Horses	No	2,921	15.13±0.415	0.808	0.419
		Yes	20	19.21±6.318		
	Mares	No	644	12.52±20.821	-0.764	0.445
		Yes	3	3.33±3.333		
Strike Rate	Geldings	No	2,272	15.84±0.477	1.111	0.267
		Yes	17	22.01±7.229		
Wins at Age 7 Years	All Horses	No	2,157	8.38±0.385	0.528	0.598
		Yes	12	11.11±5.922		
	Mares	No	393	4.54±0.678	-0.476	0.634
		Yes	2	0.00±0.000		
Strike Rate	Geldings	No	1,762	9.21±0.443	0.699	0.485
		Yes	10	13.33±6.939		
Places at Age 7 Years	All Horses	No	2,157	15.65±0.494	-1.063	0.288
		Yes	12	8.61±3.765		
	Mares	No	393	14.30±1.129	-0.902	0.367
		Yes	2	0.00±0.000		
Strike Rate	Geldings	No	1,762	15.93±0.549	-0.767	0.443
		Yes	10	10.33±4.338		
Wins at Age 8 Years	All Horses	No	1,499	8.28±0.474	0.377	0.707
		Yes	6	11.11±8.240		
	Mares	No	209	6.71±1.469	2.034	0.043
		Yes	1	50.00		
Strike Rate	Geldings	No	1,288	8.50±0.497	-0.647	0.518
		Yes	5	3.33±3.333		
Places at Age 8 Years	All Horses	No	1,499	15.47±0.556	1.366	0.172
		Yes	6	27.50±10.397		
	Mares	No	209	13.51±1.389	0.985	0.326
		Yes	1	33.333		
Strike Rate	Geldings	No	1,288	15.76±0.606	1.084	0.278
		Yes	5	26.33±12.654		
Wins up to Age 8 Years	All Horses	No	4,155	5.98±0.163	-0.639	0.523
		Yes	28	4.70±1.475		
	Mares	No	1,022	3.99±0.287	0.009	0.993
		Yes	8	4.02±3.125		
Strike Rate	Geldings	No	3,128	6.63±0.194	-0.678	0.498
		Yes	20	4.98±1.696		
Places up to Age 8 Years	All Horses	No	4,155	12.17±0.242	0.135	0.892
		Yes	28	12.57±3.066		
	Mares	No	1,022	10.02±0.462	0.902	0.397
		Yes	8	17.30±8.055		
Strike Rate	Geldings	No	3,128	12.87±0.282	-0.621	0.535
		Yes	20	10.68±2.911		
Wins up to Age 8 Years	All Horses	No	4,155	0.90±0.024	-0.982	0.326
		Yes	28	0.61±0.195		

Places up to Age 8 Years	Mares	No	1,022	0.49 \pm 0.033	0.373	0.709
		Yes	8	0.63 \pm 0.498		
	Geldings	No	3,128	1.03 \pm 0.030	-1.147	0.252
		Yes	20	0.60 \pm 0.197		
	All Horses	No	4,155	1.73 \pm 0.038	-0.265	0.791
		Yes	28	1.61 \pm 0.533		
	Mares	No	1,022	1.19 \pm 0.061	-0.273	0.785
		Yes	8	1.00 \pm 0.598		
	Geldings	No	3,128	1.91 \pm 0.045	-0.096	0.923
		Yes	20	1.85 \pm 0.708		

Appendix 27

Certificate of Veterinary Examination of a Horse for Sale at Auction in Ireland

CERTIFICATE OF VETERINARY EXAMINATION OF A HORSE FOR SALE AT AUCTION IN IRELAND (see Note 1)

This is to certify that on (date) _____
at the request of the **VENDOR**
Vendor's Name _____
Address _____

I have examined the horse described below which is to be offered for sale at auction by Tattersalls (Ireland) Limited at Fairyhouse on _____. I hereby declare that the horse certified here is as described below or as described on Passport No: _____

VENDOR'S DECLARATION:

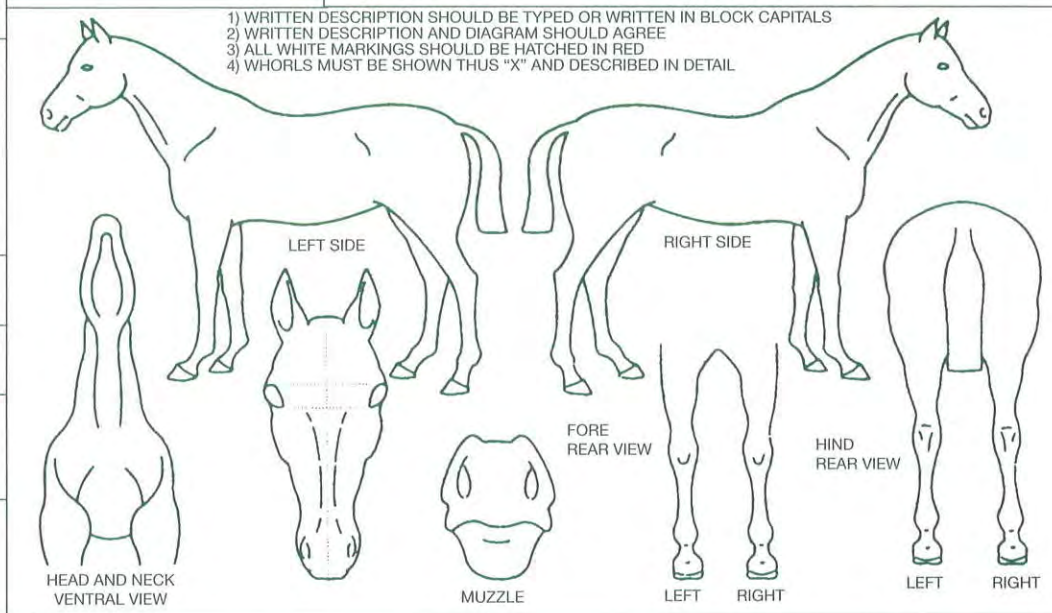
I declare that the horse described below is offered for sale as being suitable for:
I declare that this horse has not received any medication or abnormal nutrient likely to interfere with the findings of a clinical examination and is not subject to any disease, injury, physical abnormality or any vice other than recorded below or declared here _____

I hereby agree that this examination and certificate is to be used solely in connection with the sale of the horse under the conditions pertaining to the sales shown opposite.

Signature _____

Date _____

LOT No:
NAME of horse (or breeding)
COLOUR
SEX
AGE by documentation
OR
APPROX. AGE by dentition (see Note 2)



IDENTIFICATION

Head: _____
Neck: _____
Limbs: LF _____
RF _____
LH _____
RH _____
Body: _____

REPORT OF EXAMINATION (See Note 3): I find no clinically discoverable signs of disease, injury or physical abnormality other than those here recorded (or recorded on the attached sheet)

Continued on attached sheet Yes / No
Warranty (see Note 4) _____ Blood taken and stored for testing for NSAIDs and other substances YES / NO
Radiological or specialised techniques in addition to the standard procedure noted on attached sheet YES / NO

OPINION (See Note 5) On the balance of probabilities the conditions set out above ARE / ARE NOT likely to prejudice the animal's use for _____
(See Vendor's Declaration above)

Owing to _____ stages _____ of the standard procedures were omitted (See Note 3)

Veterinary Surgeon's Signature _____ Date of Signature _____

Veterinary Surgeon's Name (in block capitals) _____

Address _____

NOTES
See overleaf

Appendix 28

Transcript of Vendor's Certificate of Veterinary Examination of a Horse for Sale at Auction in Ireland



Tattersalls (Ireland) Ltd.

REG OFFICE FAIRYHOUSE • RATOATH • CO. MEATH • IRELAND • REG NO 49072
TEL DUBLIN (01) 8864300 • FAX DUBLIN (01) 8864303
WEB www.tattersalls.ie • EMAIL accounts@tattersalls.ie
VAT No IE1408799K

Transcript of vendor's certificate of veterinary examination of a horse for sale at auction in Ireland.

Lot No X

Cert No 233

Sale Derby Sale 2012

Date 25/6/12

Breeding Sire/Dam

A Vendor's Veterinary Certificate

from **Private Veterinarian**

dated **20/6/12**

has been issued which states

He finds no clinically discoverable signs of disease, injury or physical abnormality.

and that on the balance of probabilities the conditions set out above **Are Not**

likely to prejudice the animal's use for **Racing**

This horse has been re-examined by the Tattersalls (Ireland) Veterinary Panel and

Agreed

in the opinion of **Panel Veterinarian**

Checked by

AT

Date

25.06.12

Appendix 29

Conditions of Sale for Tattersalls Ireland

CONDITIONS OF SALE

TATTERSALLS (IRELAND) LIMITED (hereinafter called “TATTERSALLS (Ire)”)

These Conditions of Sale apply to all Lots sold at Tattersalls (Ireland) Limited's Derby Sale 2009 and subsequent Sales.

1. PARTIES

- 1.1. The Purchaser shall be the highest bidder acceptable to the Auctioneer subject to the right reserved by TATTERSALLS (Ire) to fix a minimum selling price at all or any sales and subject to any reserve price.
- 1.2. The Vendor shall be the person or persons stated in TATTERSALLS (Ire) sales entry form to be the owner or owners of the Lot.

2. CONDUCT OF SALE

- 2.1. All Lots offered for sale will be subject to a reserve price which shall be either the minimum selling price or any higher reserve price in respect of which TATTERSALLS (Ire) have received written notification from the Vendor prior to the time at which the Lot is put up for auction.
- 2.2. As provided for by Law a seller of a Lot OR any one person on his behalf may bid for that Lot at the auction. The seller shall mean the Vendor or, if different, the owner. Where however a Lot is stated to be “Partnership Property” any partner, syndicate member, co-owner or other person interested therein may bid on his own behalf either personally or through an agent.
- 2.3. The Auctioneer is the sole arbiter as to the existence or otherwise of any dispute during and/or in connection with the conduct of the sale and if any such dispute arises the Lot so disputed shall be immediately put up again and re-sold.
- 2.4. The Auctioneer reserves the right without giving any reason therefore to reject any or all bids.
- 2.5. TATTERSALLS (Ire) reserve the right to withdraw any Lot before or during any Sale without giving any reason therefore.
- 2.6. It is the Vendor's duty to ensure that written notification of any reserve price greater than the minimum selling price is received by TATTERSALLS (Ire) prior to the time at which the Lot is put up for auction.

3. COMMISSIONS PURCHASER PREMIUMS AND FEES

3.1. An entry fee is payable to TATTERSALLS (Ire) in respect of each lot entered and catalogued.

3.2. Commission is payable to TATTERSALLS (Ire) by the Vendor:

(a) At the rate of 1.5% of the price of each Lot sold by auction at TATTERSALLS (Ire) Sales or sold otherwise than by auction where TATTERSALLS (Ire) is a party to the sale or

(b) At the rate of 7.5% of the price of each Lot sold otherwise than by auction where TATTERSALLS (Ire) is not a party to the sale, between the date of publication of the catalogue for the Sale in which the Lot was entered and 28 days after the last day of that Sale, provided that TATTERSALLS (Ire) reserve the right to substitute a fair price for any sale price notified to it for the purpose of this sub-condition or to determine a fair price when no sale price is notified to it, or

(c) At the rate of 5% of the price of each Lot bought in at auction at TATTERSALLS (Ire) Sales provided also that where a Lot is bought-in 100% by the Vendor and

(i) TATTERSALLS (Ire) receive written notification to that effect by the end of selling on the day of the buy-in and

(ii) the Vendor instructs TATTERSALLS (Ire) to publish the Lot as bought-in, then the rate of commission is reduced to 2.5%

Full commission is to be paid by the Vendor to TATTERSALLS (Ire) on demand in respect of any Lot returnable and returned to the Vendor.

3.3. An Auction Fee is payable to TATTERSALLS (Ire) by the Vendor at the rate of 2.5% of any reserve price of any Lot. However where the reserve price is €20,000 or less no fee will be charged.

3.4. In addition to the entry fee a withdrawal fee of 50% of the entry fee is payable to TATTERSALLS (Ire) by the Vendor in respect of any Lot which is entered and catalogued for a Sale and which is withdrawn prior to the time it is due to be sold in the Sale unless a Veterinary Certificate of unfitness to the satisfaction of TATTERSALLS (Ire) is produced or unless commission is payable under sub-condition 3.2(b)

3.5. A Purchaser Premium is payable by the Purchaser of each Lot at the rate of 6% of the price of each Lot sold

- 3.6. Commissions, Purchaser Premiums and Fees are subject to VAT or equivalent where applicable.

4. PAYMENT BY PURCHASERS

- 4.1. The Purchaser of each Lot shall:

(a) immediately after the purchase of a Lot

- (i) sign the form of Purchase Confirmation supplied by TATTERSALLS (Ire)
- (ii) give his name, address and proof of identity to TATTERSALLS (Ire) if so required, and
- (iii) pay the full amount of the purchase price, the Purchaser Premium, the Veterinary Fee payable under Conditions 9.1(b) and 9.2(d) where applicable, and the charge payable under Condition 22.7 where applicable, together with VAT by cash or acceptable banker's draft to TATTERSALLS (Ire).

(b) take away at his own expense every Lot purchased by him, the day following the sale of the Lot.

- 4.2. If the Purchaser shall fail to comply with any of the conditions set out in Condition 4.1(a), above, TATTERSALLS (Ire) may retain possession of and resell the Lot and any progeny born after the Sale to a Lot described as "believed in foal" (hereafter "its Progeny") either immediately or otherwise by public or private sale and the deficiency if any attending such resale shall be made good by the defaulting Purchaser on demand by TATTERSALLS (Ire).

- 4.3. If the Purchaser shall fail to comply with any of the conditions set out in Condition 4.1 above then, save where TATTERSALLS (Ire) shall have exercised its right under Condition 4.2 above or Condition 5.5, TATTERSALLS (Ire) shall be entitled to sue the Purchaser for the full amount of the purchase price and the other amounts as set out in Condition 4.1(a)(iii).

As between TATTERSALLS (Ire) and the Vendor TATTERSALLS (Ire) shall be under no duty to sue and nothing which they do or do not do shall affect the right of the Vendor to enforce any right he may have against the Purchaser.

- 4.4. Unless there is in force a Purchaser's Authorisation accepted in writing by TATTERSALLS (Ire) the highest bidder in the ring and any principal for whom he may be acting shall be jointly and severally liable under the contract of sale.

5. TITLE AND POSSESSION

- 5.1. TATTERSALLS (Ire) may at its absolute discretion permit the Purchaser to take away a Lot notwithstanding that the Purchaser has not complied with the obligation immediately to pay the Purchase Price pursuant to Condition 4.1(a)(iii). If TATTERSALLS (Ire) so permits the Purchaser to take away a Lot it does so as a matter of grace and the Purchaser shall remain liable to pay the Purchase Price as aforesaid.
- 5.2. The property in a Lot and its Progeny (if any) shall not pass to the Purchaser or any principal for whom he is acting until the Purchase Price has been paid in full together with any interest due thereon pursuant to these Conditions. The Lot and its Progeny (if any) shall be at the Purchaser's risk in all respects from the fall of the hammer.
- 5.3. At any time until property in a Lot and its Progeny (if any) has passed to the Purchaser or any principal for whom he is acting the Purchaser and/or his principal shall forthwith, on demand by TATTERSALLS (Ire) (a) deliver up possession of the Lot and its Progeny (if any) to TATTERSALLS (Ire) or (b) inform TATTERSALLS (Ire) of the name and address of any third party in possession of the Lot and its Progeny (if any) and irrevocably instruct that third party to hold the Lot and its Progeny (if any) to the exclusive order of TATTERSALLS (Ire) and provide written evidence to TATTERSALLS (Ire) satisfaction that such instruction has been given. Upon a demand being made by TATTERSALLS (Ire) under this sub-condition, any licence which the Purchaser and/or his principal may have to sell the Lot and/or its Progeny shall forthwith determine.
- 5.4. If the Purchaser and/or his principal fail to comply with a demand for delivery up of a Lot and its Progeny (if any) made under Condition 5.3, TATTERSALLS (Ire) may enter upon any premises owned, occupied or controlled by the Purchaser and/or his principal where the Lot and/or its Progeny are situated to repossess the Lot and its Progeny (if any) at any time between 9am and 6pm on any day.
- 5.5. At any time after making a demand pursuant to Condition 5.3 above TATTERSALLS (Ire) may resell any Lot and its Progeny (if any) and such sale may be held immediately or otherwise by public or private sale.

6. PURCHASER'S LIABILITY AFTER RESALE

- 6.1. Where TATTERSALLS (Ire) has resold a Lot and/or its Progeny pursuant to a power to resell it under any provision of these Conditions, the Purchaser shall be liable to pay the difference between the Purchase Price and the price achieved on the resale (if lower) after deduction of any expenses incurred in the sale. If a higher price is achieved on the resale, TATTERSALLS (Ire) shall be entitled to keep the full amount so achieved.

- 6.2. The Purchaser shall also be liable to pay TATTERSALLS (Ire) any expense (including legal costs) incurred in recovering any Lot and/or its Progeny (if any) pursuant to these Conditions and any expense incurred for a reasonable period thereafter in keeping, training and/or insuring the Lot and/or its Progeny and/or engaging any veterinarian, farrier or other person for the purpose of treating the Lot and/or its Progeny.
- 6.3. TATTERSALLS (Ire) shall be entitled to sue for any sum due under this Condition. As between TATTERSALLS (Ire) and the Vendor TATTERSALLS (Ire) shall be under no duty to sue and nothing which it does or does not do shall affect the right of the Vendor to enforce any right he may have against the Purchaser.

7. RESPONSIBILITY FOR HORSES

- 7.1. Each Lot shall be at the Vendor's risk from the time of arrival for the period the Lot shall be at TATTERSALLS (Ire) premises or outside standing (hereinafter collectively called "the Premises"), unless such Lot shall have been sold, in which case such Lot shall be at the Purchaser's risk :
- (a) From one hour after the fall of the hammer or in the event of a re-examination being requested by the Purchaser under Condition 9.2(d), until the completion of the re-examination. In the event of the Sale being cancelled by the Purchaser under Condition 9.2(d), the Lot shall remain at the Vendor's risk.
 - (b) If sold privately, from the time of sale.
- 7.2. TATTERSALLS (Ire) shall incur no liability in respect of or in connection with any loss of or harm sustained by a Lot (including death or injury) at any time whilst on the Premises.
- 7.3. TATTERSALLS (Ire) shall not be liable for any loss or damage caused by any Lot whether by disease, accident or otherwise whilst the said Lot is on the Premises save that nothing in this sub-condition shall be taken as excluding or restricting or as attempting to exclude or restrict TATTERSALLS (Ire) liability for death or personal injury resulting from negligence of TATTERSALLS (Ire) its servants or agents.
- 7.4. TATTERSALLS (Ire) reserve the right to examine any Lot and/or isolate any Lot and/or refuse any Lot entry to or require the removal of any Lot from "the Premises" where in TATTERSALLS (Ire) discretion any such Lot presents or appears to present a danger to persons, property or other bloodstock. TATTERSALLS (Ire) shall incur no liability in the event of TATTERSALLS (Ire) exercising its rights under this sub-condition
- 7.5. No Lot shall be removed from the Premises without a written order from TATTERSALLS (Ire)

8. VENDORS

8.1. The Vendor shall be entitled to receive the proceeds of sale of each Lot sold (less any commission and fees due) on but not before the 35th day following the last day of each Sale provided that:-

- (a) TATTERSALLS (Ire) shall have received the full amount of the purchase price or released the Lot from the Premises and
- (b) TATTERSALLS (Ire) shall not have been notified that a dispute has arisen in respect of or in connection with payment for the Lot and/or the proceeds of sale thereof whether under these Conditions of Sale or otherwise howsoever and
- (c) TATTERSALLS (Ire) shall not have granted an extension of time for lodgment of a Veterinary Certificate pursuant to Condition 11,

TATTERSALLS (Ire) shall incur no liability in the event of TATTERSALLS (Ire) withholding payment pursuant to this Condition and the Vendor expressly acknowledges that, notwithstanding the provisions of Condition 7, TATTERSALLS (Ire) is entitled to release a Lot from its premises without first having obtained payment therefore.

- 8.2. In any case where TATTERSALLS (Ire) shall have received the purchase monies from the Purchaser but shall have been notified of a dispute within the meaning of Condition 8.1(b) they will account for the said monies when the said dispute shall have been resolved either by agreement or, failing agreement, by court proceedings.
- 8.3. Release of a Lot by a Vendor or his Agent without a written order from TATTERSALLS (Ire) shall not be deemed release by TATTERSALLS (Ire) within the meaning of this Condition.
- 8.4. Settlement will only be made against a written application by or on behalf of the Vendor which has been accepted by TATTERSALLS (Ire).
- 8.5. TATTERSALLS (Ire) shall be under no obligation to place the proceeds of sale on deposit pending payment out by them.
- 8.6. All payments are made and/or sent at the risk of the Vendor and, if different, the payee.
- 8.7. Where pursuant to this Condition TATTERSALLS (Ire) have paid to the Vendor or credited his account with the net proceeds of sale of a Lot then the Vendor shall, if so required by TATTERSALLS (Ire), assign to them by way of legal assignment (or by any other mode of assignment required by TATTERSALLS (Ire)) all and any of his rights against the Purchaser arising out of the contract of sale of the Lot and to the extent that property in the Lot has been retained by the Vendor, that property. Save as provided aforesaid the Vendor shall not assign any rights or obligations under his agreement with TATTERSALLS (Ire).

- 8.8. Where the Purchaser is disputing his obligation to pay for the Lot the Vendor shall, save where TATTERSALLS (Ire) have exercised their right under Condition 8.7 above, if so required by TATTERSALLS (Ire), repay to TATTERSALLS (Ire) on demand any payment made by TATTERSALLS (Ire) to the Vendor in respect of the net proceeds of sale of the Lot.
- 8.9. Where the Purchaser is disputing his obligation to pay for a Lot the Vendor shall, if so required by TATTERSALLS (Ire), promptly provide and use best endeavours to procure that its servants and agents promptly provide to TATTERSALLS (Ire) and its advisers such full co-operation, documentation and assistance as TATTERSALLS (Ire) may request in order to investigate the subject matter of the dispute.
- 8.10. Where there has been any change in the ownership of a Lot entered for sale with TATTERSALLS (Ire) between the date of the sales entry form and the time at which the Lot is due to be put up for auction the Vendor shall forthwith notify TATTERSALLS (Ire) of this fact in writing and of the amount of the sale price and use his best endeavours to ensure that the new owner(s) forthwith notify TATTERSALLS (Ire) whether it is his wish to proceed with a sale of the Lot at the auction for which it is entered and, if so, to execute and deliver to TATTERSALLS (Ire) a properly completed sales entry form.
- 8.11. The Vendor shall indemnify TATTERSALLS (Ire) in respect of any loss suffered or costs, disbursements or expenses incurred bona fide by TATTERSALLS (Ire) by reason of bringing or defending any proceedings (including but not limited to any adverse costs awarded against TATTERSALLS (Ire)) or otherwise howsoever which arise whether directly or indirectly from any act or omission by the Vendor in connection with the sale of a Lot whether or not such act or omission be a breach of his contract with TATTERSALLS (Ire).

9. SALE WITH VETERINARY CERTIFICATE

- 9.1. (a) Vendors of Lots offered for sale "With Veterinary Certificate" at the **Derby Sale or the Breeze Up Sales** must have obtained a Certificate of Veterinary Examination of a Horse for Sale at Auction in Ireland ("Vendors Veterinary Certificate") within 14 days prior to the auction at which the Lots are offered for sale.
- (b) Prior to the Sale the Vendor must present the Lot together with the Vendors Veterinary Certificate for re-examination by a Veterinary Surgeon or Surgeons appointed by TATTERSALLS (Ire) as required by TATTERSALLS (Ire).

The Veterinary Fee for such re-examination shall be payable by the Purchaser.

- (c) The Vendors Veterinary Certificate together with the results of the re-examination by the Veterinary Surgeon or Surgeons appointed by TATTERSALLS (Ire) will be available for inspection by prospective Purchasers at the offices of TATTERSALLS (Ire) on the day of the sale.

- (d) The findings of the Vendors Veterinary Certificate together with the results of the re-examination will be the subject of an announcement from the Auctioneers Rostrum.

- 9.2. (a) Vendors of Lots offered for sale “with Veterinary Certificate” **at Sales other than the Derby Sale or the Breeze Up Sales** must have obtained a Vendors Veterinary Certificate from a Veterinary Surgeon or Surgeons within 14 days prior to the auction at which the Lots are offered for sale.

The Veterinary fee for such examination shall be payable by the Vendor.

- (b) The Vendors Veterinary Certificate will be available for inspection by prospective purchasers at the offices of TATTERSALLS (Ire) on the day of the sale. It shall be the Vendors responsibility to ensure that the Certificate is lodged with TATTERSALLS (IRE) in a timely manner. TATTERSALLS (Ire) shall not be held liable to any party by reason of the non-production of the Veterinary Certificate.
- (c) The findings of the Vendors Veterinary Certificate will be the subject of an announcement from the Auctioneers Rostrum.
- (d) A Purchaser of such a Lot shall be entitled to request that the Lot be re-examined by a Veterinary Surgeon appointed by TATTERSALLS (Ire) provided that the Purchaser has notified the Sales Office within one hour of the fall of hammer that a re-examination is required. If a Purchaser does not elect to have the Lot re-examined, the Purchaser shall not be entitled to return the Lot under Condition 10. In the event of a disagreement arising between the Veterinary Surgeon on re-examination and the findings of the Vendors Veterinary Certificate, the Purchaser shall be entitled to cancel the Sale, provided that the Purchaser has notified the Sales Office of the cancellation within one hour of having been notified by TATTERSALLS (Ire) of the Veterinary Surgeon’s findings. The Veterinary fee for such re-examination shall be payable by the Purchaser.
- (e) A Lot remains at the Vendors risk until completion of the re-examination procedure. Once re-examination has been completed and the Lot has passed such re-examination, such Lot is then held to be at the Purchasers risk. Following the sale of a Lot by auction or privately it remains the Vendors responsibility to confirm if re-examination has been requested and to present the Lot for re-examination.

- 9.3. Prospective purchasers may prior to sale, subject to Condition 14, use a Veterinary Surgeon of their own choice to check the clinical condition of any Lot other than as a Whistler and/or Roarer.

- 9.4. Subject to Condition 9.2(d), a Lot offered for sale “with Veterinary Certificate” is not returnable in respect of any matter covered by that certificate.

10. DESCRIPTION AND HEALTH

Where certificates, notices in writing and/or any other documents are required to be received by TATTERSALLS (Ire) under these Conditions of Sale, that requirement can only be satisfied by delivering them to TATTERSALLS (Ire) at their Fairyhouse offices.

- 10.1. Each Lot must be registered with a Stud Book Authority approved by the International Stud Book Committee, and if not so registered is returnable in accordance with Condition 11 hereof.
- 10.2. A Stallion is a male horse at stud. A Gelding is a male horse which has been castrated (i.e. had both testicles removed in their entirety). A Colt is a male horse up to and including the age of four years, provided that he is not properly describable as a Stallion or a Gelding. A Horse is a male horse five years of age or over not properly describable as a Stallion or a Gelding. The description Stallion or Colt or Horse does not exclude a rig or crypt-orchid. (The term rig or crypt-orchid applied to male horses in which one or both testes do not descend into the scrotum from the abdomen at the usual time). If a male horse is not properly described he is returnable in accordance with this Condition and with Condition 11 hereof. Provided always that the purchaser may only return the Lot if:
 - (a) TATTERSALLS (Ire) have received notice in writing from the Purchaser before 5 p.m. on the 7th day after the day on which the Lot was sold that he requires an examination to determine whether the Lot has been mis-described under this Condition.
 - (b) The Lot has been returned to TATTERSALLS (Ire) premises or any other premises designated by TATTERSALLS (Ire) by the Purchaser by 5.00 p.m. on the 14th day after the day on which the Lot was sold
 - (c) TATTERSALLS (Ire) have received a certificate in writing from a Veterinary Surgeon of the Purchaser's choice before 5 p.m. on the 14th day after the day on which the Lot was sold stating that the Lot has been mis-described under this Condition.
 - (d) TATTERSALLS (Ire) have received notice in writing from the Purchaser contending that the Lot has been mis-described under this Condition before 5 p.m. on the 14th day after the day on which the Lot was sold.
- 10.3. A Filly should only be described up to and including the age of four years. Thereafter she must be described as a Mare. If at anytime before reaching five years she is covered she must subsequently at all times be described as a Mare. If a Filly or a Mare is not properly described she is returnable in accordance with Condition 11 hereof. For all Mares there must be given particulars of all coverings. If a Mare has subsequent to any such coverings slipped foal the fact must be stated and if not stated or the particulars of coverings are not given as required the Mare is returnable in accordance with Condition 11 hereof.

- 10.4. Any Mare described as “believed in foal” must have a Covering Certificate “lodged with TATTERSALLS (Ire)”. A Covering Certificate is only to be regarded as having been “lodged with TATTERSALLS (Ire)” where, prior to the time of sale of the Mare, either the Covering Certificate has been deposited at TATTERSALLS (Ire) offices or TATTERSALLS (Ire) have been notified in writing by a Stud Book Authority approved by the International Stud Book Committee that the covering has been registered with it and is recorded electronically. Where, in respect of a Mare described as “believed in foal” a Covering Certificate has not been “lodged with TATTERSALLS (Ire)” as aforesaid, such Mare is returnable in accordance with this Condition and Condition 11 hereof unless:
- (a) an announcement is made from the Rostrum that the Covering Certificate has not been lodged, and
 - (b) the Covering Certificate or written notification as aforesaid from a Stud Book Authority approved by the International Stud Book Committee is received by TATTERSALLS (Ire) by 5pm on the 14th day after the day on which the Lot was sold.
- Provided always that the Purchaser may only return the Mare if, by 5pm on the 21st day after the day on which the Mare was sold, he has:-
- (a) returned the Mare to TATTERSALLS (Ire) at Fairyhouse or any other premises designated by TATTERSALLS (Ire), and
 - (b) TATTERSALLS (Ire) have received a notice in writing from the Purchaser of his contention that a Covering Certificate for the Mare had not been “lodged with TATTERSALLS (Ire)” within the meaning of this sub-condition.
- 10.5. Any Mare described as “believed in foal” is returnable in accordance with this Condition and Condition 11 hereof if found to be barren at the time of sale, provided always that the Purchaser may only return the Mare if:
- (a) TATTERSALLS (Ire) have received a certificate in writing from a Veterinary Surgeon of the Purchaser's choice before 5.00pm on the second day after the day on which the Mare was sold alleging the Mare to be barren at the time of sale.
 - (b) The Mare has not been removed from the Premises.
- 10.6. Any Lot
- (a) which is a Wind-sucker (i.e. habitually gulps or swallows air whether in association with grasping fixed objects with incisor teeth or not) is returnable in accordance with Condition 11 unless described without qualification as a Wind-sucker, Crib-biter or Cribber in which event the Lot is not returnable.

- (b) which has been operated on for the correction of Wind-sucking as defined above, including Crib-biting, is returnable in accordance with Condition 11 unless so described.
- (c) Crib-biters and Cribbers are not returnable unless the Crib-biting is associated with Wind-sucking in which case the Lot is returnable as a Wind-sucker unless it is described without qualification as a Wind-sucker, Crib-biter or Cribber.

10.7. Any Lot

- (a) which is an habitual Weaver (i.e. habitually swings its head and neck to and fro and transfers weight from one forelimb to the other alternately) or
- (b) which is an habitual Boxwalker (i.e. habitually walks either backwards and forwards or round and round the box repeatedly in an aimless manner),

is returnable in accordance with this Condition and Condition 11 hereof unless so described.

Provided always that the Purchaser may only return the Lot if:

- (a) TATTERSALLS (Ire) have received a notice in writing from the Purchaser before 5.00 pm on the 7th day after the day on which the Lot was sold that he requires an examination for either an habitual Weaver or an habitual Boxwalker.
- (b) He has returned the Lot to TATTERSALLS (Ire) at Fairyhouse or any other premises designated by TATTERSALLS (Ire) by 5.00 p.m. on the 14th day after the day on which the Lot was sold.
- (c) TATTERSALLS (Ire) have received a certificate in writing from a Veterinary Surgeon of the Purchaser's choice before 5.00 p.m. on the 14th day after the day on which the Lot was sold stating that as a result of observation between 7 and 14 days after the day on which the Lot was sold, it is believed that the Lot is an habitual Weaver or an habitual Boxwalker.
- (d) TATTERSALLS (Ire) have received a notice in writing from the Purchaser of his contention that the Lot is an habitual Weaver or an habitual Boxwalker before 5.00 p.m. on the 14th day after the day on which the Lot was sold.

10.8. Any Lot described as a Horse in Training

- (a) which is a Whistler and/or Roarer as hereinafter defined is returnable in accordance with Condition 11 hereof unless so described or described as being 'heard to make a noise' without qualification. In the case of a Horse in Training a Whistler and/or Roarer is a Lot which can be heard to make a characteristic abnormal inspiratory sound when actively exercised (ridden where possible) and which has Laryngeal Hemiplegia (Recurrent

(b) which has been tubed or otherwise operated upon for the correction of Whistling and/or Roaring, is returnable in accordance with Condition 11 hereof unless so described.

10.9. Any Lot described as a Yearling (other than one sold in a 'January/February Sale' to which this sub-condition does not apply) and any Lot described as a Two-year-Old in a 'January/February Sale',

(a) which is a Whistler and/or a Roarer as hereinafter defined, or

(b) which has been tubed or otherwise operated upon for the correction of Whistling and/or Roaring, or

(c) which has rostral displacement of the palatopharyngeal arch, or epiglottic entrapment, or chondroma or severe arytenoids chondritis, or subepiglottic cyst(s), or cleft palate,

is returnable in accordance with this Condition and Condition 11 hereof unless so described or described as being heard to make a noise without qualification in which event the Lot is not returnable under either sub-paragraph (a), (b) or (c). In the case of a Lot to which this sub-condition applies, a Whistler and/or Roarer is a Lot which can be heard to make a characteristic abnormal inspiratory sound when actively exercised and which has Laryngeal Hemiplegia (Recurrent Laryngeal Neuropathy) when examined with the endoscope. Provided always that the Purchaser may only return the Lot if:

(a) It has not been removed from the Premises.

(b) TATTERSALLS (Ire) have received a notice in writing from the Purchaser within 24 hours from the Fall of the Hammer that he requires an examination

(c) TATTERSALLS (Ire) have received a certificate in writing from a Veterinary Surgeon of the Purchaser's choice before 5.00 p.m. on the fourth day after the day on which the Lot was sold alleging the Lot to be a Whistler and/or Roarer or has any of the conditions set out in sub-paragraph (c).

(d) TATTERSALLS (Ire) have received a notice in writing from the Purchaser of his contention that the Lot is a Whistler and/or Roarer or has any of the conditions set out in sub-paragraph (c) before 5.00 p.m. on the fourth day after the day on which the Lot was sold.

10.10. Any Lot described as "unbroken" at the time of sale is returnable in accordance with this Condition and Condition 11 hereof if at the time of sale it meets the criteria of being "broken in". Any Lot described otherwise than as "unbroken" at the time of sale is not returnable in accordance with this Condition.

Provided always that the Purchaser may only return the Lot if :

- (a) TATTERSALLS (Ire) have received a notice in writing from the Purchaser before 5:00pm on the 5th day after the day on which the Lot was sold that he requires an examination to determine whether the Lot has been “broken in”. If a Purchaser can show to the satisfaction of TATTERSALLS (Ire) that exceptional and unavoidable circumstances have made compliance with this sub-condition impossible, then TATTERSALLS (Ire) reserve the right at their sole discretion to grant an extension to the notice period not exceeding 3 additional days.
- (b) He makes the Lot immediately available for examination by TATTERSALLS (Ire) or a person nominated by TATTERSALLS (Ire) at Fairyhouse or any other premises designated by TATTERSALLS (Ire).
- (c) TATTERSALLS (Ire) are satisfied as a result of the examination that the Lot should have more properly been described as “broken in” at the time of sale.

- 10.11. Any Lot which has run at a Meeting not recognised by a Racing Authority or is restricted from racing by any Racing Authority and not so described is returnable in accordance with Condition 11 hereof.
- 10.12. Save as aforesaid any material mis-description in the catalogue details of any Lot or in any information with regard thereto announced from the Auctioneer’s Rostrum shall render the Lot returnable in accordance with Condition 11 hereof unless, in either case, corrected by announcement from the Auctioneer's Rostrum.

11. LOTS RETURNED TO TATTERSALLS (IRE)

If the Purchaser of any Lot contends that it is returnable to the Vendor under Condition 10 the Lot must be returned to TATTERSALLS (Ire) with a notice in writing of such contention and in the case of Lots returned to TATTERSALLS (Ire) under Conditions 10.3 , 10.6 and 10.8 with a veterinary certificate specifying the nature of the complaint and in the case of Lots returned to TATTERSALLS (Ire) under Conditions 10.2, 10.4, 10.5, 10.7, 10.9 and 10.10 as prescribed therein. Where certificates, notices in writing and/or any other documents are required to be received by TATTERSALLS (Ire) under these Conditions of Sale, that requirement can only be satisfied by delivering them to TATTERSALLS (Ire) offices.

Lots returned to TATTERSALLS (Ire) under Condition 10 must be returned to Fairyhouse or any other premises designated by TATTERSALLS (Ire) and the requisite notices/certificates be received by TATTERSALLS (Ire) before 5.00 p.m. on the seventh day after the day on which the Lot was sold except for those returned to TATTERSALLS (Ire) under Conditions

10.2, 10.4, 10.5, 10.7, 10.9 and 10.10, which must be returned to TATTERSALLS (Ire) as prescribed therein. However in the case of a return of a Lot to TATTERSALLS (Ire) under Conditions 10.8 or 10.9 where TATTERSALLS (Ire) receive a written notice from the Purchaser's Veterinary Surgeon stating that he is unable to give a certificate within the prescribed time on grounds connected with the health or characteristics of the Lot then TATTERSALLS (Ire) may decide to extend the prescribed time for lodgment of the certificate and, for this purpose, may have regard to the opinion of any Veterinary Surgeon or Surgeons appointed by them. Failure to comply with the provisions of this Condition and Condition 10 shall be an absolute bar to any claim that the Lot is returnable and the Purchaser shall be bound to keep and pay the full amount of the purchase price for the Lot.

Where the Purchaser has returned the Lot to TATTERSALLS (Ire) in accordance with this Condition and Condition 10 hereof and the Vendor does not accept that the Lot is returnable to him TATTERSALLS (Ire) will decide the dispute under Condition 12.

12. RESOLUTION PROCEDURES

Any dispute arising under Conditions 10 and 11 shall be decided by TATTERSALLS (Ire) in such manner and either without evidence or after hearing evidence of such nature and taken in such manner as TATTERSALLS (Ire) shall think fit and TATTERSALLS (Ire) decision shall be final and binding on both Vendor and Purchaser and TATTERSALLS (Ire) shall not be responsible for any loss or expense incurred by any party to such dispute. The decision shall be given not later than 21 days from the date of the return of the Lot to TATTERSALLS (Ire) unless TATTERSALLS (Ire) are advised by the Veterinary Surgeon or Surgeons appointed by them that a longer period or a different method of testing be necessary due to the health or characteristics of the Lot.

In determining whether any Lot is returnable as an habitual Weaver or an habitual Boxwalker under Condition 10.7 TATTERSALLS (Ire) may have regard to the opinion of any Veterinary Surgeon or Surgeons appointed by them whose opinion shall be given after allowing the Lot to settle in its environment and have adequate exercise.

In determining whether any Lot is returnable as a Whistler and/or Roarer under Conditions 10.8 and 10.9 respectively TATTERSALLS (Ire) may have regard to the opinion of any Veterinary Surgeon or Surgeons appointed by them whose opinion shall be given after actively exercising the Lot (a Horse in Training shall be ridden where possible) to hear whether it makes a characteristic abnormal inspiratory sound and examining the Lot with the endoscope to determine if Laryngeal Hemiplegia (Recurrent Laryngeal Neuropathy) be present. A Lot shall only be returnable under Conditions 10.8 or 10.9 (a) or (b) if both the characteristic abnormal inspiratory sound and Laryngeal Hemiplegia (Recurrent Laryngeal Neuropathy) are present.

The Purchaser expressly acknowledges that the condition revealed by post-sale examination with the endoscope for which return to the Vendor is allowed is ONLY as set forth in Conditions 10.8 and 10.9 (a) or (b) and further acknowledges that there are other conditions

which may be revealed by such examination which may affect the desirability of purchasing the Lot but which are NOT grounds for return to the Vendor.

The party against whom a decision is given shall:

- (a) Pay to TATTERSALLS (Ire) all costs and expenses (including insurance) incurred by them or in connection with the taking of evidence or making the decision
- (b) indemnify TATTERSALLS (Ire) against all costs claims demands actions and expenses arising out of or in connection with such decisions.

The Lot shall be at the Purchaser's risk in all respects until the decision that it is returnable to the Vendor is given by TATTERSALLS (Ire).

If it be decided that the Lot is returnable to the Vendor, the Vendor shall pay to TATTERSALLS (Ire) on behalf of the Purchaser the cost of returning the Lot to TATTERSALLS (Ire) or any other premises designated by TATTERSALLS (Ire) under these Conditions of Sale, and the amount of any payment under this Condition shall be fixed by TATTERSALLS (Ire) whose decision shall be final and binding on all parties to the dispute.

No Lot is returnable to the Vendor in any circumstances other than in accordance with this Condition and Conditions 10 and 11 hereof. Unless so returnable the Purchaser shall be bound to keep and pay the full amount of the purchase price for the Lot.

13. RESPONSIBILITY

The Vendor is responsible for the accuracy of all information concerning the pedigree description and health of a Lot. No statement certificate forecast or expression of opinion in respect thereof is or is to be deemed to be in any circumstances a representation, undertaking, warranty by TATTERSALLS (Ire) or condition of any contract with TATTERSALLS (Ire) and TATTERSALLS (Ire) shall in no circumstances become liable to any person in respect thereof. TATTERSALLS (Ire) reserve the right to require that any notice regarding the pedigree description and health of a Lot must be in writing and lodged at TATTERSALLS (Ire) Office prior to the sale of the Lot.

TATTERSALLS (Ire) do not warrant that any Lot is eligible for participation in any scheme or race notwithstanding any announcement or notice in a catalogue or otherwise.

14-18 PURCHASERS

- 14. Purchasers are advised to inspect each Lot prior to purchase. Purchasers must ensure that the Vendor's approval is obtained before a veterinary inspection is made. All Lots are sold

Where a Lot is described as being sold with race entries, the responsibility thereof passes to the Purchaser at Fall of Hammer.

15. Each Lot is sold as it stands and there is no term implied in any sale that any Lot is of satisfactory quality or is fit for training or any particular purpose except as indicated on a Vendor's Veterinary Certificate and the results of a re-examination under Condition 9.
16.
 - 16.1. The Vendor as defined in Condition 1.2 shall remain at all times the Vendor for the purpose of and within the meaning of these Conditions whether or not he was in fact the owner at the time of entry or if he was, notwithstanding any transfer of ownership prior to the fall of the hammer. Such transfer shall not by itself operate as the withdrawal or revocation of any authority to sell.
 - 16.2. Where TATTERSALLS (Ire) in their Sales catalogue make a statement as to the ownership of a Lot they do so in good faith and in accordance with the information provided in the sales entry form but they do not thereby make nor do they otherwise make any representation whatsoever, whether express or implied, as to the identity of the owner or owners of any Lot at the time of entry, time of sale or at any other time.
 - 16.3. Without prejudice to the generality of the foregoing the fact that TATTERSALLS (Ire) makes no such representation means that it shall not be a term of any contract between TATTERSALLS (Ire) and a Purchaser (whether condition, warranty or otherwise) that the Lot is at the time of sale or was at the time of entry or at any other time the property of any particular person or persons and that if a purchaser purchases a Lot relying on any representation as to the ownership of the Lot at the time of entry, time of sale or at any other time he does so, as far as his contract with TATTERSALLS (Ire) is concerned, entirely at his own risk and such representation and/or reliance shall not prevent TATTERSALLS (Ire) being entitled to recover the full amount of the purchase price immediately in accordance with Condition 4.
 - 16.4. Consistently with and without prejudice to the foregoing in any case where TATTERSALLS (Ire) are able to procure that title in the Lot passes to the Purchaser the fact, if it be the case, that as at the time of sale they did not have authority to sell shall not prevent TATTERSALLS (Ire) being entitled to recover the full amount of the purchase price immediately in accordance with Condition 4.

17. An allegation by a Purchaser that a particular person, whether or not the owner of the Lot for the time being has taken part whether directly or indirectly in the bidding shall not prevent TATTERSALLS (Ire) being entitled to recover the full amount of the purchase price immediately in accordance with Condition 4.
18. Further and without prejudice to any other provision of these Conditions TATTERSALLS (Ire) make no representation whatsoever, whether express or implied, about, with regard to or in connection with any Lot. A Purchaser must make his own enquiries and exercise his own judgement as to a Lot and its value and if a purchaser purchases any Lot relying on any representation whether by or on behalf of the Vendor or otherwise howsoever he does so, as far as his contract with TATTERSALLS (Ire) is concerned, entirely at his own risk and such representation and/or reliance shall not prevent TATTERSALLS (Ire) being entitled to recover the full amount of the purchase price immediately in accordance with Condition 4.

19. **DISPUTES BETWEEN VENDOR AND PURCHASER**

Where, as between Vendor and Purchaser a dispute has arisen out of or in connection with the sale of any Lot TATTERSALLS (Ire) shall not be liable to either party in connection therewith and no such dispute shall prevent TATTERSALLS (Ire) being entitled to recover the full amount of the purchase price immediately in pursuance of Condition 4.

20. **WITHDRAWAL**

TATTERSALLS (Ire) shall not be liable to any person for any loss alleged to have been suffered as the result of the withdrawal of a Lot from any Sale for any reason.

21. **SALES LEVY**

Unless a Vendor or Consignor from the United Kingdom has notified TATTERSALLS (Ire) in writing within 14 days from the last day of the Sale that he is unwilling to contribute to a Sales Levy, TATTERSALLS (Ire) will deduct 0.75% from the sales proceeds of each and every Lot payable to Vendors from the United Kingdom. The Sales Levy will be paid to the Thoroughbred Breeders Association.

22. DRUGS

This Condition applies to all yearlings and older Lots and to Horses in and out of Training.

- 22.1. A Lot shall be returnable to the Vendor in accordance with this Condition where TATTERSALLS (Ire) decide in its absolute discretion that a blood/urine sample taken from the said Lot in accordance with this Condition contains non-steroidal anti-inflammatory drugs or their metabolites ("proscribed drugs").
- 22.2. A sample will be taken from a Lot in accordance with this Condition where:
- (i) the Purchaser, in compliance with Condition 22.3 hereof, irrevocably instructs TATTERSALLS (Ire) to take a sample from the said Lot for the purposes of this Condition and to have the sample tested for the presence of proscribed drugs, and
 - (ii) the Vendor complies with Condition 22.4 (a) hereof and
 - (iii) a member of a veterinary team appointed by TATTERSALLS (Ire) takes a sample from the said Lot while it is in a holding area designated by TATTERSALLS (Ire).
- 22.3. Where a Purchaser wishes to give an instruction under Condition 22.2 (i) hereof he shall do so immediately after the purchase of a Lot and by signing to this effect on the form of Purchase Confirmation supplied by TATTERSALLS (Ire) who will not accept instructions given in any other way.
- 22.4. Where an instruction is given by the Purchaser under Condition 22.3 hereof:
- (a) The Vendor shall deliver the said Lot directly from the sales ring to the designated holding area in accordance with TATTERSALLS (Ire) directions and for this purpose the Purchaser agrees that notwithstanding that risk in the said Lot has passed to him he is not entitled to take possession or control of the said Lot until after the Lot is released from the designated holding area. Where TATTERSALLS (Ire) decide that the Vendor has failed to deliver the said Lot as aforesaid the said Lot shall be returnable to the Vendor in accordance with this Condition.
 - (b) If after one hour from the delivery of the Lot to the designated area a sample has not been taken from the said Lot notwithstanding that the said veterinary team have used such reasonable endeavours as are commensurate with the circumstances including the number of Lots from which samples are to be taken and their behaviour, the contract of sale shall stand and the Purchaser shall be bound to keep the said Lot and to pay the full amount of the purchase price therefore.

- 22.5. TATTERSALLS (Ire) shall exercise its absolute discretion in making a decision under this Condition. TATTERSALLS (Ire) decision shall be given by notice to both the Vendor and the Purchaser as soon as reasonably possible after the Sale of the said Lot, shall be final and shall be binding on both the Vendor and the Purchaser and TATTERSALLS (Ire) shall not be responsible for any loss or expense incurred by any party arising out of its decision.
- 22.6.
- (a) Where the Purchaser elects to return the lot to the Vendor under this Condition such election must be made by returning the Lot to TATTERSALLS (Ire) at Fairyhouse with a notice in writing of such an election within 7 days of the date on which notice of TATTERSALLS (Ire) decision is given to the Purchaser. Failure to comply with this sub-section shall be an absolute bar to any claim that the Purchaser is entitled to return the lot under this Condition and the Purchaser shall be bound to keep the Lot and pay the full amount of the purchase price therefore. Any transport, keep or other costs incurred by the Purchaser in connection with the Lot shall be for the Purchaser's account in any event.
 - (b) Upon TATTERSALLS (Ire) having acknowledged receipt of the Purchaser's notice in accordance with Condition 22.6 (a) hereof TATTERSALLS (Ire) shall give notice to both Vendor and Purchaser that the Contract of Sale in respect of the said Lot has been determined.
 - (c) The Lot shall be at the Purchaser's risk in all respects from the fall of the Hammer until notice is given by TATTERSALLS (Ire) in accordance with Condition 22.6(b) hereof. For the avoidance of doubt, in any case where TATTERSALLS (Ire) has given such notice the Lot is thereafter at the risk of the Vendor.
 - (d) If the Purchaser has elected to return the Lot to the Vendor in accordance with this Condition the Vendor shall:
 - (i) Pay to TATTERSALLS (Ire) on invoice a sum equivalent to the commission that would be payable under these Conditions of Sale had the contract of sale not been determined by the Purchaser.
 - (ii) Pay to TATTERSALLS (Ire) on invoice their charge for taking and testing the sample and in making and giving its decision under this Condition. (iii) Indemnify TATTERSALLS (Ire) against all costs claims demands actions and expenses arising out of or in connection with its decision under this Condition.
- 22.7. Save as provided for in Condition 22.6 (d) hereof the Purchaser shall pay to TATTERSALLS (Ire) on invoice their charge for taking and testing the sample and making and giving its decision under this Condition.
- 22.8. For the avoidance of doubt, time runs for the purposes of the Conditions of Sale generally notwithstanding the Purchaser's instruction for a sample to be taken and tested in accordance with this Condition.

22.9.

- (a) Any notice under this Condition shall be in writing and shall be delivered by hand or sent by first-class post or by telex or by fax to the Vendor or to the Purchaser at the address given on the sales entry form or Purchase Confirmation as the case may be, or at their normal address of residence or business. Such notice shall be given or deemed given on the date of delivery or the second day after posting or on the day of transmission as the case may be.
- (b) For the purposes of Condition 22.6 (a) such notice in writing shall be delivered to TATTERSALLS (Ire) at Fairyhouse and shall not be treated as given unless acknowledged in writing by TATTERSALLS (Ire).

23. INTEREST

TATTERSALLS (Ire) reserve the right to charge interest on unpaid accounts from the date of sale at the rate of 1.50 per cent per month or part thereof. The rate may be varied by notice in writing posted at the office of TATTERSALLS (Ire) during these Sales. Interest will not be charged on accounts cleared within 28 days of the last day of each Sale.

24. LAW

These Conditions of Sale are in all respects to be governed by and to be construed in accordance with the laws of Ireland and the Courts of Ireland shall, unless TATTERSALLS (Ire) elect otherwise, have exclusive jurisdiction to hear and determine any action arising hereunder.

Appendix 30

Conditions of Sale for Goffs

Conditions of Sale

Conditions Of Sale (updated January 2012)

This sale is held subject to the Conditions of Sale set out below. All potential Vendors and Purchasers are advised to read carefully these Conditions. The Conditions in this Sale catalogue take precedence over any previously issued Conditions Of Sale.

1 DEFINITIONS

- 1.1 **Affiliate**" means any person that Controls Goffs, is Controlled by Goffs or is under common Control with Goffs.
- 1.2 **Associated Company** means Robert J. Goff & Co Plc, a subsidiary of Robert J Goff & Co Plc or a holding company of Robert J Goff & Co Plc or any other subsidiary of that holding company or an Affiliate, but specifically, without limitation of the foregoing, Doncaster Bloodstock Sales Limited, Goffs Bloodstock Sales Limited and Arqana SAS;
- 1.3 **Catalogue** means the catalogue in which these terms and conditions are contained. The word Catalogue also includes any supplement to it issued by Goffs from time to time.
- 1.4 **Control** means, in relation to any person, the beneficial ownership of any of the issued share capital of, or the legal power to direct or cause the direction of the general management of the person in question or its holding company or parent undertaking
- 1.5 **Debtor** means any Vendor, Purchaser or New Purchaser (as appropriate) with any liability to Goffs;
- 1.6 **Goffs** means Robert J. Goff & Co. plc and/or Goffs Bloodstock Sales Limited
- 1.7 **Goffs Premises** means Kildare Paddocks or outside standing.
- 1.8 **Lot** means the horse which is to be sold and which has a Lot number in the Catalogue
- 1.9 **Owner** means the person, partnership, syndicate or corporation named on the Entry Form as the owner of the Lot.
- 1.10 **Prohibited Substances** means any anabolic steroid and/or any non-steroidal anti-inflammatory drugs or their metabolites
- 1.11 **Purchaser** means the highest bidder to whom a Lot is knocked down by Goffs or who purchases the Lot privately following the sale.
- 1.12 **Purchase Price** (as regards the Purchaser) is the price in Euro at which the Lot was knocked down by Goffs in the ring or the price at which it is sold privately plus V.A.T. and commission.

1.13 **Sale** means the sale by auction conducted by Goffs.

1.14 **Sale Price** (as regards the Vendor) means the price in Euro at which the Lot was knocked down by Goffs or the price at which it is sold privately, subject to deductions for commission, entry fee and any other charges which may apply.

1.15 **Sales Office** means the office behind the auctioneers' rostrum, as used on Sale days.

1.16 **The Panel** means one or more Veterinary Surgeons appointed by Goffs

1.17 **Vendor** means the person, partnership or corporation named on the Entry Form as the owner of the Lot, provided however where an Owner is not named in the Entry Form the person who entered the horse for sale on behalf of the owner shall be deemed to be the Vendor. The Vendor if not the Owner shall be deemed at all times and for all purposes to be the servant or agent of the Owner.

1.18 In these Conditions:-

- 1.18.1 the singular includes the plural and vice versa;
- 1.18.2 references to persons include bodies corporate, unincorporated associations, governments, states, partnerships and trusts (in each case, whether or not having separate legal personality);

2. VENDORS

2.1 All Lots are subject to a reserve price which shall either be the minimum selling price set by Goffs or any higher reserve price which Goffs must have received in writing from the Owner, the Vendor or his agent prior to the Lot being offered for sale. Where no instruction is received in writing from the Owner, the Vendor or his agent, the Lot will be offered without reserve

2.2 Each Vendor undertakes that a Lot entered in the Catalogue shall not be sold by the Owner before the Sale.

2.3 Goffs will endeavour to have all Catalogue information correctly stated, but the Vendor is responsible for the accuracy of its content and the correction of any error or omission. Goffs shall not be liable for any statements made in the Catalogue or from the rostrum concerning a Lot. Catalogue descriptions, pedigrees or performances are prepared for them by Weatherbys as a service to Goffs who are acting in their capacity as agent for the Vendor, and the content or accuracy of any representation or statement are solely made by the Vendor in relation to any Lot. Neither Weatherbys nor Goffs accept any liability for any loss resulting from any errors or omissions contained in the catalogue detail.

Conditions of Sale *(Continued)*

2.4 The Vendor undertakes:

- (a) To lodge in the Sales Office for each Lot, the Passport, vaccinations, health certificates in accordance with Appendix 1 of these Conditions and any veterinary certificate referred to in condition 4.1, whichever apply, prior to the Sale. Goffs will not offer any Lot for sale unless the Passport and any other relevant documentation have been lodged prior to the Sale in the Sales Office.
- (b) To ensure that all Lots born after 1st January 1999 are correctly micro-chipped. The Vendor undertakes to bear the cost of micro-chipping if any Lot is found not to be correctly microchipped by the conclusion of the Sale.
- (c) All Lots from yearlings (after July 1st) upwards with the exception of broodmares that have been covered must have up to date vaccinations in accordance with the Vendors' Sales Requirements (Appendix 1 of these Conditions). Where vaccinations are not up to date, a notice to that effect will be announced by the auctioneer, or the Lot must be withdrawn..

2.5 Upon receipt of a single written application from the Vendor Goffs will pay to the Vendor the Sale Price of each Lot sold not earlier than 35 days and not later than 40 days after the last day of Sale or on such date as specified in the Entry Form, subject to condition 2.6 below. Goffs are

not under any obligation to place the sale proceeds on deposit prior to the Vendor's Application for Payment.

2.6 In the case of any Lot where a dispute has arisen between Vendor and Purchaser, or where there are competing claims for payment, Goffs may refuse to make payment to the Vendor pending resolution of the dispute. In exercising this right, Goffs will incur no liability to any party, and no interest shall be payable by Goffs on any sale proceeds retained.

2.7 In the case where any Lot has been knocked down to a bidder who has made no payment arrangements prior to bidding Goffs may impose one of the following measures in their absolute discretion:

- (a) The sale will be deemed to be cancelled and the Lot will immediately be reoffered on behalf of the Vendor
- (b) Goffs will not make payment to the Vendor until the Lot has been paid for in full

2.8 The Vendor shall indemnify Goffs in respect of any loss, or liability suffered or costs disbursements or expenses incurred bona fide by Goffs by reason of bringing or defending any proceedings which arise directly or indirectly from any breach of these Conditions of Sale by the Vendor.

2.9 COMMISSION AND FEES

2.9.1 An entry fee is payable to Goffs by the Vendor for each Lot entered and catalogued. The fee is non-refundable on publication of the Catalogue.

For every Lot sold by auction or bought in by the Vendor, the following charges are payable:

- (a) 1.5% of the price of each Lot, (subject to a minimum of g100) is payable by the Vendor and 6% by the Purchaser.
- (b) 7.5% of the price of each Lot is payable by the Vendor to Goffs in respect of any Lot returnable and/or returned.
- (c) 7.5% of the price of each Lot is payable by the Vendor to Goffs in respect of any Lot sold between the date of publication of the Catalogue and seven calendar days following the last day of the sale
- (d) When a Lot is bought in 100% by the Vendor 7.5% of the price of that Lot is payable by the Vendor unless Goffs are notified by the conclusion of the sales session in which the Lot was offered and the Lot is published as a "Vendor" sale, in which case 2.5% of the Price is payable by the Vendor to Goffs subject to a minimum commission of g100. To achieve eligibility for Goffs "Sales Races", 7.5% of the Price is payable by the Vendor. Additionally see Appendix 1 of these Conditions of Sale.

2.9.2 When a Lot is unsold the Vendor will pay to Goffs 2.5% of the reserve price if the reserve price exceeds €20,000.

2.9.3 A withdrawal fee of €250 (€1,000 for the Orby Sale) is payable by the Vendor to Goffs in respect of any Lot which is catalogued and withdrawn prior to the Sale unless notification of withdrawal is accompanied by a veterinary certificate to Goffs satisfaction.

2.9.4 All fees and commissions are subject to VAT at the appropriate rate.

3-8 THE SALE 3. BIDDING

3.1 Bidding shall be in Euro. Subject to the discretion of the auctioneer, no bid shall advance less than €100 up to €2,000; €200 up to €10,000; €500 up to €20,000; €1,000 up to €50,000; €2,000 up to €100,000; €5,000 up to €200,000; €10,000 up to €500,000; €20,000 thereafter

3.2 Should any dispute arise between two or more bidders, or between Goffs and any bidder, Goffs decision shall be binding on all parties. At Goffs' discretion the Lot in dispute may be put up again for auction and resold, subject to the reserve price in accordance with 2.1 above

Conditions of Sale (*Continued*)

4. BASIS OF SALE

- 4.1 There is no term implied in any sale that any Lot is of merchantable quality or is fit for training or any particular purpose. Any term, condition or warranty that might be incorporated into or apply to these Conditions of Sale are excluded to the maximum extent permissible by applicable law. It is the responsibility of the Purchaser to ensure that he is satisfied with the condition of any Lot before bidding. Additionally a Purchaser must make his own enquiries and exercise his own judgement as to the value of a Lot

A Lot may be offered for sale in one or more of the following ways:

- (a) As it stands (without Veterinary Certificate) subject always to paragraph 4.2 below.
- (b) With a Veterinary Certificate (subject to post-sale Re-Examination by The Panel) issued by Goffs and dated not earlier than 14 days prior to the Sale and which must be lodged in the Sales Office prior to the sale, and which will be read out by Goffs at the time of Sale. If required by a Purchaser such Lot shall be subject to re-examination by a member of The Panel, providing the Purchaser has notified the Sales Office within 60 minutes of purchase that a re-examination is required. Failure to request a re-examination under this Condition will prevent the Purchaser seeking cancellation of the sale for any conditions in 4.2 below. In the event

of a difference of opinion between the Panel and the Veterinary Certificate the sale may be cancelled at the discretion of the purchaser, provided notice of cancellation is made by the Purchaser to Goffs no later than 1 hour after the Purchaser was notified by Goffs of the Panel's decision

- (c) With a Pre-Sale Veterinary Certificate, (subject to pre-sale examination by The Panel) to which the following conditions shall apply:
 - (i) a Veterinary Certificate issued by Goffs and dated not earlier than 14 days prior to the Sale shall be lodged in the Sales Office before the re-examination
 - (ii) the Lot shall be re-examined prior to the Sale by a member of The Panel
 - (iii) the Panel's certificate shall be deemed to be an expression of opinion by a duly qualified veterinary surgeon and shall not constitute a warranty
 - (iv) the Certificate will be read out by Goffs at the time of Sale
 - (v) the fee for the re-examination shall be borne by the Purchaser
 - (vi) No Lot shall be permitted to leave Goffs Premises between the re-examination by The Panel and the time of sale
- (d) With a Pregnancy Certificate dated not earlier than 14 days prior to the Sale which must be lodged in the Sales' Office by the Vendor prior to the Sale, and which will be read out by Goffs at the time of Sale. Where a Broodmare is sold

with a Veterinary Certificate of Pregnancy, the Purchaser may request to have her re-examined for pregnancy by The Panel provided the Purchaser has notified Goffs within 60 minutes of purchase that a re-examination is required. If the Broodmare is found not to be as certified, the sale may be cancelled at the discretion of the Purchaser provided notice of cancellation is made by the Purchaser to Goffs no later than 1 hour after the Purchaser was notified by Goffs of The Panel's decision. The Purchaser shall in all cases be liable for the re-examination fee.

- (e) With a Breeding Certificate dated not earlier than 14 days prior to the Sale which must be lodged in the Sales' Office prior to the sale, and which will be read out by Goffs at the time of Sale. Fillies or broodmares which are not in foal and which are offered for sale as Breeding Stock must be offered with a Breeding Certificate, except for broodmares that have foaled since the publication of the Catalogue and prior to the sale where no warranty as to their suitability for breeding is given or implied. Where a Broodmare or Filly is sold with a Breeding Certificate, the Purchaser may request to have her re-examined for suitability for breeding purposes only by The Panel provided the Purchaser has notified Goffs within 60 minutes of purchase that a re-examination

is required. If the Broodmare or Filly is found not to be as certified, the sale may be cancelled at the discretion of the Purchaser provided notice of cancellation is made by the Purchaser to Goffs no later than 1 hour after the Purchaser was notified by Goffs of The Panel decision.

Immediately following Goffs being notified that an examination on behalf of a Purchaser is required, the Vendor must present the Lot to The Panel. In the event of the Vendor not making himself available, the Purchaser may elect to cancel the Sale. In the event of the Lot being taken for such examination by either by the Purchaser, Goffs or their respective agents it nevertheless remains at the sole risk of the Vendor until the completion of the re-examination, and the party taking the Lot shall not be responsible for the death, injury or any damage caused by the Lot or to the Lot while temporarily under its control.

4.2. RE- EXAMINATION PROCEDURE

- 4.2.1 Any Lot which is a two-year-old or older, (other than a filly out-of training, or a broodmare or a stallion), which is a Whistler and/or a Roarer, (being a horse which makes an abnormal inspiratory sound when actively lunged) and in addition has Laryngeal

Conditions of Sale *(Continued)*

- Hemiplegia (Recurrent Laryngeal Neuropathy) and is not so described, is returnable subject to compliance with Condition 4.2.3
- 4.2.2 Any Lot described as a yearling (after 1st July of its yearling year) which is or has any of the following
- (a) A Whistler and/or a Roarer (being a horse which makes an abnormal inspiratory sound when actively lunged) and in addition has Laryngeal Hemiplegia (Recurrent Laryngeal Neuropathy); or
 - (b) Rostral displacement of the palatopharyngeal arch; or
 - (c) Epiglottic entrapment; or
 - (d) Chondroma or severe arytenoids chondritis; or
 - (e) Subepiglottic cyst(s); or
 - (f) Cleft palate and is not so described, is returnable, in accordance with Condition 4.2.3
- 4.2.3 Any Lot found to be suffering from any conditions described in Conditions 4.2.1 or 4.2.2 is returnable and the sale cancelled provided that:
- (i) It has not been removed from Goffs Premises; and
 - (ii) Within 24 hours from the fall of hammer:
- (a) The Purchaser's Veterinary Surgeon must lodge a certificate with Goffs, expressing his opinion that the Lot is or has any of the conditions set out in Condition 4.2.1 or 4.2.2; and
 - (b) The Purchaser must present the Lot to The Panel as instructed by Goffs.
- (iii) The re-examination will be arranged by Goffs at the Purchaser's expense.
- Whether a Lot is or has any of the conditions set out in Condition 4.2.1 or 4.2.2 will be decided by The Panel whose decision shall be final and binding on the Vendor and Purchaser.
- 4.2.4 Additionally the Sale may be cancelled at the discretion of the Purchaser if the Lot, in the opinion of the Panel, is incapable of (i) being lunged in both directions to The Panel's satisfaction or (ii) scoped to The Panel's satisfaction,
- 4.2.5 The Purchaser expressly acknowledges that there are other conditions other than those set out in Conditions 4.2.1 and 4.2.2 which may be revealed by endoscope which are not grounds for return to the Vendor.
- 4.2.6 The appropriate re-examination fee arising from any re-examination by The Panel shall be paid to Goffs by the Purchaser.
- 4.2.7 Goffs in no way accept responsibility for the findings of The Panel carrying out the re-examination.

5. PROHIBITED SUBSTANCES

- 5.1 This Condition stands alone and is separate and distinct from Condition 4 and applies to all Lots offered in the Orby Yearling Sale, Open Yearling Sale, Punchestown Sale and the June National Hunt (Land Rover) Sale.
- 5.2 Where Prohibited Substances are referred to in a certificate signed by an independent qualified veterinary surgeon and read out by Goffs at the time of the Sale the Condition will apply but the Lot shall not be returnable to the Vendor unless other Prohibited Substances than those certified and read out are present.
- 5.3 A blood sample will be taken from the Lot where the Purchaser instructs Goffs to do so immediately after purchase of the Lot by signing to this effect on the Acknowledgement of Purchase Form supplied by Goffs. The Purchaser shall be responsible to Goffs for the costs and expenses of taking and testing the sample unless the said sample contains Prohibited Substances other than those certified and read out in which event the Vendor shall be responsible for such costs and expenses. Failure to request a drug test under this Condition will be an absolute bar to the Purchaser returning the Lot under this Condition.
- 5.4 When an instruction under Condition 5.3 is received the Vendor shall immediately deliver the Lot to a designated holding area in accordance with Goffs' instructions. If the Vendor fails to comply with these instructions the sale may be cancelled at the discretion of the Purchaser.
- 5.5 Where a Purchaser instructs Goffs to take and test a blood sample the said Lot shall not be removed from Ireland or the United Kingdom and if they do so, the Purchaser shall be liable for the costs of returning the Lot back to the Vendor in the event of a Purchaser electing to return the Lot in accordance with a right to do so under this Condition.
- 5.6 If after one hour from the delivery of the Lot to the designated holding area a sample has not been taken from the said Lot (notwithstanding that the veterinary team have used such reasonable endeavours as are commensurate with the circumstances) the Sale may be cancelled at the Purchaser's discretion.
- 5.7 Where a sample is found to contain Prohibited Substances other than those certified and read out the Purchaser may elect to return the Lot to the Vendor providing such election is made to Goffs by 5pm on the seventh calendar day after the Purchaser was notified by Goffs of the result.

Conditions of Sale *(Continued)*

- 5.8 Where a Purchaser elects to return a Lot in accordance with this Condition Goffs shall notify both parties that the contract of sale is cancelled and the Lot will be at the Vendor's risk from such time that he is notified and the Vendor must arrange and pay for the Lot to be collected, subject to Condition 5.5.

6. ENGAGEMENTS

- 6.1 A Lot is sold with engagements as given in the Catalogue, or announced at the time of Sale. Goffs however, accept no responsibility for engagements given or omitted. It will be the sole responsibility of the Vendor to ensure that the relevant documentation is completed and lodged with the Authority in question, but of the Purchaser to cancel any race entry if a forfeit applies. A Declaration of Forfeit for UK engagements must be made to Weatherbys and for Irish engagements to Horse Racing Ireland.
- 6.2 In particular Goffs do not warrant that a Lot is eligible for participation in the Racing Post Yearling Bonus Scheme, the Racing Post Breeze-Up Bonus Scheme or any other breeders' scheme whether European or American notwithstanding that a statement to that effect or so implying may have been included in the Catalogue or made from the Rostrum.

7. PRIVATE SALES

- 7.1 Any sale concluded between a Purchaser and a Vendor within seven calendar days following the last day of the Sale at which the Lot was unsold or bought in by the Vendor shall be subject to the Conditions of Sale. Such transactions must be finalised in writing on a Private Sale Form signed by the Vendor, the Purchaser and an authorised representative of Goffs. For the avoidance of doubt, this includes any sale conducted on line. The terms of condition 9 below will apply to the Purchaser.
- 7.2 Where Goffs accepts the transfer of a Lot from the Purchaser to a third party, the appropriate Private Sale Form must be completed in the Sales Office. The terms of condition 9 below will apply to the new Purchaser.

8. PASSING OF RISK AND TITLE

- 8.1 The Lot will be at the Vendor's risk at all times until the fall of hammer (or time of sale if sold privately) when the risk shall pass to the Purchaser subject to conditions 8.2 and 8.3 below.
- 8.2 Any Lot sold subject to re-examination under the terms of condition 4.1 above shall be at the Vendor's risk for 60 minutes from the fall of the hammer or, if re-examination is requested,

until the completion of the re-examination. Risk remains with the Vendor if/when the Lot fails the examination and passes to the Purchaser if/when the Lot passes.

- 8.3 Any Lot tested for Prohibited Substances under the terms of condition 5 above shall remain at the Vendor's risk from the fall of the hammer until the sample has been taken from the Lot when risk passes to the Purchaser. If the sample proves to be positive for Prohibited Substances, risk will pass back to the Vendor when the Vendor is notified.
- 8.4 Subject to condition 8.5 and notwithstanding the passing of risk in this condition or delivery of the Lot to the Purchaser, the Vendor shall retain title to the Lot until the later of the full Purchase Price has been paid to Goffs or it is clear to Goffs that the Lot is not returnable or is not required to be returned pursuant to these Conditions of Sale, at which stage title in the Lot passes to the Purchaser.
- 8.5 Where Goffs have paid out the Vendor in accordance with condition 2.5 above, before having received the Purchase Price in full from the Purchaser title of the Lot will vest in Goffs.

9. PURCHASERS

- 9.1 Goffs strongly recommend that Purchasers should attend the Sale in person and Purchasers are strongly advised to inspect each Lot prior to purchase. It is the responsibility of the Purchaser to ensure that he is satisfied with the condition of any Lot before bidding.
- 9.2 All Lots are sold subject to these Goffs Conditions of Sale and are subject to any announcements that may be made by the Auctioneer. A Vendor may call upon Goffs to amend the Catalogue description at the Sale and it is the Purchaser's responsibility to ensure he hears any announcement made by the auctioneer as a consequence. The information on the Goffs notice board, website and announcement boards in the Sales ring is for guidance only and Goffs are not liable for any error or omission from such information.
- 9.3 All certificates referred to in the Catalogue will be available for inspection in the Sales Office prior to the Sale.
- 9.4 Immediately after the purchase of each Lot, the Purchaser must sign the Acknowledgement of Purchase Form confirming the sales details together with his name, address and other information as required by Goffs.

Conditions of Sale *(Continued)*

- 9.5 Payment must be made in Euro by the Purchaser for each Lot on the day of the Sale and the Lot must be removed by the Purchaser by the close of each day's sale. Prior to the Sale Goffs may agree to other payment terms at their discretion and may allow the Purchaser to remove the Lot before full payment has been received.
- 9.6 No Lot will be raced until it has been paid for in full.
- 9.7 Where a Purchaser bids or buys on behalf of another, the Purchaser must disclose the name and address of his principal when required by Goffs and both the Purchaser and his principal shall be jointly and severally liable under these Conditions.
- 9.8 Where the Purchaser notifies Goffs after the Sale that a Lot has been bought on behalf of another and asks Goffs to invoice that person ("the Nominee"), Goffs (at its absolute discretion) may agree to do so on the basis that the Purchaser (his principal, if any) and the Nominee will be jointly and severally liable to pay the Purchase Price. The Purchaser's payment obligations in respect of the relevant Lot will only be discharged in the event that the Nominee has paid the whole of the Purchase Price. However, where the Nominee pays part of the sum due but the remainder is unpaid, Goffs' claim shall be limited to the unpaid sum.
- 10. GOFFS RIGHTS/ EXCLUSIONS AND LIMITATIONS**
- 10.1.1 Every person on the Goffs Premises on which the Sale takes place, whether before, during or after the Sale shall be deemed to be there at their own risk and Goffs exclude liability in respect of any injury sustained by any of them or for any loss or damage to property which may occur from any cause whatsoever, save that nothing in this sub-condition shall be taken to exclude or restrict liability at law for death or personal injury to any person arising from Goffs' negligence.
- 10.1.2 Goffs accept no liability for any, disease, accident, loss or fatal or non fatal injury caused to a Lot (including death, theft or injury) or caused by any Lot while it is being moved by Goffs employees, agents or subcontractors between yards and Goffs Premises or at any time whilst it is on Goffs Premises. Provided always, that nothing in this sub-condition shall be taken to exclude or restrict Goffs' liability at law for death or personal injury to persons arising from Goffs' negligence.
- 10.2 Goffs retain the right to prohibit entry to the Goffs premises of any person or animal whatsoever

- 10.3 Goffs, as Agents for the Vendor, reserve the following rights, viz:
- (a) To refuse the bidding of any person, without giving any reason.
 - (b) To bid by themselves for any Lot.
 - (c) To withdraw the Lot from sale at any time before it has been knocked down without disclosing the reserve price.
 - (d) To reserve the right to fix a minimum price at any or all Sales.
- 10.4 Goffs do not make any representation whatsoever express or implied as to the identity of the Owner or Owners of any Lot at the time of entry, time of sale or at any other time. In the event of any dispute the Purchaser's remedy, if any, shall be against the Vendor and the Vendor's remedy shall be against the Purchaser, and not against Goffs who act as Agents between Vendor and Purchaser and shall not be liable as a Party in any Action or dispute between them.
- 10.5 Goffs reserve the right to charge interest on unpaid accounts at 1.5% per month or part thereof on all accounts which are unpaid 21 days after the last date of the Sale.
- 10.6 Goffs reserve the right to charge the Purchaser €20 per day for any horse remaining at Goffs after 5.00 p.m. on the day following its day of sale. In the case of unsold horses Goffs reserve the right to charge the Vendor €20 per day.
- 10.7 If for any reason a Lot is purchased and not paid for as hereinbefore provided (notwithstanding if the risk has passed to the Purchaser) then the following provisions shall take effect until payment is received:
- (a) Goffs shall be entitled to retain the Lot, and shall have a lien over the Lot and all documents relating to it for all expenses, including freight, incurred by them or any agent of Goffs during such period of retention. Such lien may be exercised in respect of any other sum due by the Purchaser to Goffs. Goffs shall also be entitled to exercise the said lien over any documents in their possession relating to any other Lot or Lots owned by the Purchaser. A Lot shall not be delivered to the Purchaser until the expenses referred to above have been paid, in addition to the Purchase Price.
 - (b) In the event of a Lot having been removed from Goffs' premises then Goffs shall be entitled to repossess the Lot from anyone in possession of it.
 - (c) Should the Purchaser fail to pay for a Lot then such Lot may at any time be resold by public auction or private treaty, and the deficiency (if any) resulting from such resale shall immediately be made good by the defaulting Purchaser.
 - (d) Nothing in these Conditions shall preclude Goffs and/or the Vendor of a Lot from pursuing all legal remedies available to them, for

Conditions of Sale *(Continued)*

the recovering of the Purchase Price from a defaulting Purchaser and all expenses and damages and commission lost resulting from such default.

- 10.8.1 Goffs may at any time, without notice, set off any liability of a Debtor (including but not limited to the outstanding purchase price of any Lot) against any liability of any Associated Company to the Debtor (whether any such liability is present or future, actual or contingent, liquidated or unliquidated and irrespective of the currency of its denomination) and Goffs may for such purpose convert or exchange any currency.

- 10.8.2 Any exercise by Goffs of its rights under Condition 10.8 shall be without prejudice to any other rights or remedies available to Goffs under these Conditions or otherwise.

11 COMPLAINTS PROCEDURE

The Complaints Procedure applies only in the circumstances set out in Condition 12 below. For the avoidance of doubt, the clinical examinations in Condition 4 above do not apply to this Condition 11 as those examinations must be dealt with on the day of (or the day following) the Sale by the Panel.

- 11.1 A Purchaser wishing to invoke this Condition must do so by

informing Goffs in writing by 5.00 pm on the seventh calendar day after the Lot was purchased (third calendar day in the case of Conditions 12.1.5 & 12.1.6) giving specific details of their complaint, supported by a certificate signed by an independent qualified veterinary surgeon (or independent professional rider in the case of Conditions 12.1.5 & 12.1.6)

- 11.2 The complaint shall be dealt with by Goffs, or their appointee, which may be a veterinary surgeon or professional rider deemed appropriate by Goffs, at such time, at such place and in such manner as Goffs deems appropriate. The decision of Goffs on the complaint shall be final and binding on both the Vendor and the Purchaser. Goffs may have the Lot examined by their appointee and where the opinion of their appointee does not agree with the opinion of the Purchaser's appointee as expressed in his certificate furnished, then the opinion of Goffs appointee shall prevail and shall be final and binding on the parties.

- 11.3 All expenses and charges incurred by such adjudication shall be paid by the Party found to be in error.

- 11.4 For the avoidance of doubt risk remains with the Purchaser throughout any complaint and only passes back to the Vendor

when both parties are notified of Goffs decision to cancel the sale (if appropriate).

sale after 1st July of their yearling year).

- 11.5 No complaint under this condition will be dealt with by Goffs if the Lot has been removed from Ireland or the United Kingdom.

12 LOTS RETURNABLE

- 12.1 The Complaints Procedure set out in condition 11 above will only apply if the information in 12.1 below is not stated in the Catalogue or is not announced at the Sale or if the conditions in 12.2 below are not declared in the Catalogue or are not announced without qualification at the Sale. In these cases, the sale may be cancelled at the discretion of the Purchaser.

- 12.1.1 The Lot is not registered with a Stud Book Authority approved by the International Stud Book Committee.

- 12.1.2 The Pedigree or description of the Lot does not correspond with the Pedigree or description as stated in the Catalogue.

- 12.1.3 The Lot has run at an unrecognised meeting or is on the forfeit list maintained by a Recognised Turf Authority.

- 12.1.4 The Lot is described as a Colt and does not at such time have both testes palpable (this provision is to apply only to any horse offered for

- 12.1.5 The Lot is described as unbroken and should have more properly been described as broken and ridden prior to the Sale. For the avoidance of doubt a Lot described as driven in long reins will not be returnable under this Condition.

- 12.1.6 The Lot is described as untried and should have more properly been described as tried prior to Sale. A Lot will be considered tried if it
- a) has run in any race
 - b) has been catalogued in any previous Breeze-Up Sale
 - c) has appeared on any published Trainer's or Permit Holder's List
 - d) is deemed to have been galloped "upsides" prior to Sale
 - e) is deemed to have been broken and tried prior to Sale

- 12.2. Any Lot which:
- a) is a wind-sucker, (i.e. frequently swallows air whether in association with grasping fixed objects with incisor teeth or not; a crib-biter is not returnable unless the crib-biting is associated with wind-sucking, in which case the Lot is returnable as a wind-sucker); or has been unnerved; or
 - b) has been operated on for the correction of wind-sucking as defined above; or
 - c) is a weaver; (i.e. frequently swings its head and neck to and fro and transfers weight from one

Conditions of Sale *(Continued)*

- forelimb to the other alternately)
or
- d) is a boxwalker (i.e. frequently walks either backwards and forwards or round and round the box repeatedly in an aimless manner)); or
 - e) has been tubed or otherwise operated on for unsoundness in wind; or
 - f) has impaired vision or injury to the eye; or
 - g) is a wobblers

13 DISPUTES

- 13.1 Any dispute arising out of the sale of any Lot in accordance with these Conditions of Sale shall be a dispute between the Vendor and the Purchaser and in no circumstances shall Goffs be liable to either party in connection with such dispute.
- 13.2 Where Goffs are brought in as a party to any dispute despite 13.1 above, Goffs will be entitled to payment of their legal and other expenses on a full indemnity basis from the party who joins them in.

14 SAFETY

- 14.1 All lots must wear a headcollar at all times on Goffs premises. Where a Vendor is found to have left a Lot without a headcollar after the Sales, Goffs will supply a headcollar at the Vendor's expense.
- 14.4 If any Lot is ridden at any time in

conjunction with the Sale, the rider must wear an approved helmet and back protector. It shall be the responsibility of the Vendor or Purchaser to ensure that they, their employees or agents, adhere to this Condition.

15 GENERAL

- 15.1 Goffs reserve the right to add, alter or otherwise modify these Conditions of Sale.
- 15.2 These Conditions of Sale form the entirety of the agreement between Goffs, the Owner, the Vendor and the Purchaser and no variation shall be valid or binding unless specifically authorised in writing by two Executive Directors of Goffs.
- 15.3 These Conditions of Sale are to be construed and shall take effect in accordance with the laws of the Republic of Ireland and shall be subject to the exclusive jurisdiction of the Courts of the Republic Of Ireland.
- 15.4 The submission to the jurisdiction of the Courts of the Republic of Ireland shall not limit the rights of Goffs to take proceedings against the Owner, the Vendor or the Purchaser in any other Court of competent jurisdiction and the taking of proceedings in one or more jurisdictions shall not preclude the taking of proceedings in any other jurisdiction whether concurrently or not.

Appendix 31

Conditions of Sale for Doncaster Bloodstock Auctions

Conditions of Sale

Introduction

DBS draws the attention of all visitors to their Sales to the Conditions of Sale on the following pages.

They cover all aspects of DBS Sales including veterinary examinations that may apply, what may and may not be stated in the catalogue or at the time of sale, what must be declared by the Vendor, the complaints procedure if a Purchaser is unhappy with his purchase, etc.

If you are a **Purchaser**, your special attention is directed to the following conditions:

2.11 Fees and Commission

4 Basis of Sale

5 Drug Testing

9 Purchasers

10.11 Interest

12 Lots Returnable

If you are a **Vendor**, your special attention is directed to the following conditions:

2 Vendors

2.11 Fees and Commission

4 Basis of Sale

5 Drug Testing

12 Lots Returnable

DBS may alter any Condition at any time. For the avoidance of doubt, the Conditions of Sale in each Sales catalogue take precedence over any previously published in all circumstances.

Please do not hesitate to ask any of the DBS team for clarification or an explanation of any clause.

Conditions of Sale

(Revised and effective from 1 January 2012)

Doncaster Bloodstock Sales Limited (“DBS”) Conditions of Sale apply to all sales conducted by DBS. DBS draw your attention to their Guide for Buyers booklet which is available upon request, the Bloodstock Industry Code of Practice (Appendix 1) as well as the DBS Catalogue Style (Appendix 2) and Vendors Sale Requirements (Appendix 3) printed in the catalogue.

1 Definitions

1.1 “Affiliate” means any person that Controls DBS, is Controlled by DBS or is under common Control with DBS.

1.2 “Associated Company” in relation to Robert J Goff & Co Plc, a subsidiary of Robert J Goff & Co Plc or a holding company of Robert J Goff & Co Plc or any other subsidiary of that holding company or an Affiliate, but specifically, without limitation of the foregoing, DBS, Goffs Bloodstock Sales Limited and Arqana SAS.

- 1.3 “Control” in relation to any person, the beneficial ownership of any of the issued share capital of, or the legal power to direct or cause the direction of the general management of the person in question or its holding company or parent undertaking.
 - 1.4 “Debtor” Any Vendor, Purchaser or New Purchaser (as appropriate) with any liability to DBS.
 - 1.5 “The Auctioneers’ Office” means the DBS Office in the Sales Complex at Doncaster.
 - 1.6 “Banned Drugs” means Non Steroidal Anti-Inflammatory Drugs or Anabolic Steroids or their metabolites.
 - 1.7 “The British Isles” means England, Wales, Scotland and Northern Ireland.
 - 1.8 “The DBS Hawick Office” means the Auction Mart Offices in Hawick, Roxburghshire.
 - 1.9 “The Lot” is the horse which is to be sold and is described in the DBS catalogue by reference to a Lot number.
 - 1.10 “The New Purchaser” is the person to whom the Lot has been transferred after the Sale in accordance with 7.2 below.
 - 1.11 “The Owner” is the Registered Owner of the horse recorded on the database maintained by Weatherbys or other Stud Book or Racing Authorities.
 - 1.12 “The Panel” is the appointed panel of veterinary surgeons.
 - 1.13 “The Purchaser” is the person who places the highest bid which is accepted by the Auctioneer before the fall of the hammer or who purchases the Lot privately following the sale.
 - 1.14 “The Sale” means the sale by auction conducted by DBS.
 - 1.15 “The Vendor” is the Owner, or the person who enters the horse for sale on behalf of the Owner.
 - 1.16 In these Conditions:
 - 1.16.1 the singular includes the plural and vice versa;
 - 1.16.2 references to persons include bodies corporate, unincorporated associations, governments, states, partnerships and trusts (in each case, whether or not having separate legal personality); and
 - 1.16.3 “subsidiary” and “holding company” have the meanings given to them by sections 1159 of the Companies Act 2006.
- ## 2 Vendors
- 2.1 All Lots will be subject to the reserve price which shall be either the minimum bid which is set by DBS or any higher reserve price which DBS must have received in writing from the Owner, the Vendor or his agent prior to the Lot being offered.
 - 2.2 The Owner and/or Vendor is not

- permitted to sell any Lot once the catalogue has been published.
- 2.3 The details of all Lots contained in the catalogue are provided by the Vendor who is solely responsible for their contents and accuracy. Each entry will follow the DBS Catalogue Style (Appendix 2). DBS accept no liability for catalogue descriptions, pedigrees or performances, which are prepared for them by Weatherbys Bloodstock Services as a service to DBS, who are acting in their capacity as agent for the vendors, and the content or accuracy of any other warranty representation or statement made by the Vendor in relation to any Lot. Neither Weatherbys Bloodstock Services nor DBS accepts liability for any loss resulting from any errors or omissions contained in the catalogue details.
- 2.4(a) Passports and all relevant paperwork (Appendix 3) must be lodged with DBS prior to the Sale. DBS will not offer any Lot unless the correct paperwork, as outlined in the Vendors Sales Requirements, have been lodged in the Auctioneers' Office.
- (b) All Lots born after 1st January 1999 (except non-thoroughbreds) must be microchipped in accordance with HRA regulations. It will be the sole responsibility of the Vendor to ensure that any Lot is correctly microchipped and the Vendor will bear the cost of chipping if any Lot is found not to be correctly microchipped by the conclusion of the Sale.
- 2.5 All lots from yearlings (after 15 August) upwards with the exception of broodmares that have been covered must have up to date vaccinations in accordance with the Vendors Sale Requirements (Appendix 3). Where vaccinations are not up to date, a notice to that effect will be read out at the Sale or the Lot must be withdrawn.
- 2.6 All import/export paperwork must be in order prior to the Sale or the Lot must be withdrawn. It will be the sole responsibility of the Vendor to ensure that any Lot's paperwork is in order and the Vendor will bear the cost of any outstanding paperwork whilst DBS will not pay the sales proceeds to the Vendor until the appropriate documentation has been delivered to the Purchaser.
- 2.7 A Vendor or any one person on his behalf may bid for any Lot owned by such Vendor. Where however a Lot is stated to be "the Property of a Partnership" or "to Dissolve a Partnership" any partner, syndicate member, co-Owner or other person interested may bid on his own behalf either personally or through an agent.
- 2.8 In the case of any Lot where a dispute has arisen between Vendor and Purchaser, or where there are competing claims for payment, DBS may refuse to make payment

to the Vendor pending resolution of the dispute. In exercising this right, DBS will incur no liability to any party, and no interest shall be payable by DBS on any sale proceeds retained.

2.9 In the case where any Lot has been knocked down to a bidder who has made no payment arrangements prior to bidding DBS may impose one of the following measures in their absolute discretion:

- (a) The sale will be deemed to be cancelled and the Lot will immediately be reoffered on behalf of the Vendor.
- (b) DBS will not make payment to the Vendor until the Lot has been paid for in full.

2.10 Upon receipt of a **single written application from the Vendor**, DBS will pay to the Vendor the purchase price of the Lot (less any commission, fees or charges due) on the 35th day following the last day of the Sale subject to 2.6 above, 2.11 and 2.12 below. DBS will be under no obligation to place the sale proceeds on deposit prior to the Vendors application.

2.11 DBS will deduct 0.75% from the sales proceeds of British Vendors as a Sales Levy on behalf of the Thoroughbred Breeders Association, who will be notified of the Vendors name and address unless the Vendor notifies DBS in writing within 28 days of the last day of the Sale that he is unwilling to contribute.

2.12 Fees and Commission

- (a) An entry fee is payable to DBS by the Vendor for each Lot entered and catalogued. The fee is non-refundable upon publication of the catalogue and will be subject to a 5% levy to fund the BHA/TBA Inward Buyers Initiative.
- (b) The Vendor will pay DBS 1.5% commission of the price of each Lot.
- (c) The Purchaser will pay DBS 6% of the price of each Lot.
- (d) The Vendor will pay DBS 7.5% of the price of each Lot bought in at the Sales or sold privately after the catalogue was published or within 14 days after the last day of the Sale.
- (e) When a Lot is bought in 100% by the Vendor and DBS are notified by the conclusion of the sales session in which the Lot was offered the Lot will be published as a "Vendor" sale and the Vendor will pay DBS 2.5% of the sale price.
- (f) There will be a minimum commission for each Lot sold or bought in of £100.
- (g) When a Lot is unsold, the Vendor will pay DBS 2.5% of the reserve price if the reserve exceeds £15,000.
- (h) A withdrawal fee of £300 (£750 for the NH Festival, Breeze-Up, Premier Yearling, St Leger Festival,

St Leger Carnival and Hennessy Sales) will be paid by the Vendor to DBS for any lot which is catalogued and withdrawn prior to the sale unless notification of withdrawal is accompanied by a veterinary certificate to the satisfaction of DBS. If no notice is given to DBS prior to the day of the Sale the withdrawal fee charged will be £400 (£1000 for the NH Festival, Breeze-Up, Premier Yearling, St Leger Festival, St Leger Carnival and Hennessy Sales).

- (i) DBS reserve the right to charge full commission of 7.5% from the Vendor in respect of any cancelled sale.
- (j) All commission and Fees are subject to VAT at the appropriate rate.

3-8 The Sale

3 Bidding

- 3.1 The auction will be conducted in £ Sterling. Subject to the discretion of the auctioneer, no person to advance bids at less than £100 up to £10,000; £500 up to £20,000; £1,000 up to £100,000 and £2,000 thereafter.
- 3.2 DBS is the sole arbiter as to the existence or otherwise of any dispute between two or more bidders or between DBS and any bidder, during and/or in connection with the conduct of the Sale and if any dispute arises the Lot in question shall be immediately reoffered to all

parties subject to the reserve price in accordance with 2.1 above.

4 Basis of Sale

- 4.1 All Lots are sold as they stand (see 4.1(a) below) unless “Basis of Sale” on the catalogue page includes options 4.1(b) to 4.1(f) listed below. There is no term implied in any sale that any Lot is of satisfactory quality or is suitable for racing or any particular purpose:

- (a) **As They Stand** without a veterinary certificate. If a Lot is to be sold in this way, no veterinary certificate must be displayed prior to or read out at the Sale.
- (b) **Subject to Re-examination** whether with or without a formal veterinary certificate signed by an independent qualified veterinary surgeon (not the Owner, Trainer and/or Vendor). Where a veterinary certificate accompanies the Lot, it must be dated within 28 days of the Sale, lodged in the Auctioneers’ Office and read out by DBS at the Sale. In no circumstances shall the contents of any veterinary certificate constitute a warranty condition or other contractual term, description or representation made by DBS. In both cases, the re-examination procedure in 4.3 will be employed.
- (c) **Subject to Re-Examination of Wind Only.** The re-examination procedure in 4.3 will be employed. For the purpose of this Condition

no other rights of re-examination will apply.

- (d) **With a Pre Sales Veterinary Certificate.** All Lots offered in this way will be examined prior to sale by the Panel and the fee for this examination will be paid by the Purchaser to DBS. The Panel certificate will be read out at the Sale and the Veterinary Certificate will be valid for the date and time of the examination only. No lot shall be permitted to leave the DBS premises between the examination by the Panel and the time of sale. For the purpose of this Condition no other re-examination rights will apply.
- (e) **Subject to Re-Examination of Pregnancy Only.** All Broodmares which have been covered during the preceding season must be so described in the catalogue. The Vendor must lodge with DBS the required certificates as confirmed in the Vendors Sale Requirements (Appendix 3) prior to the Sale. DBS will not offer any Lot for which the correct certification has not been lodged prior to the Sale. The re-examination procedure in 4.3 will be employed. For the purpose of this Condition no other rights of re-examination will apply.
- (f) **With a Breeding Certificate.** Where a breeding certificate signed by an independent veterinary surgeon accompanies the Lot, it must be dated within 28 days of the Sale, lodged in the Auctioneers' Office and read out

by DBS at the Sale. In no circumstances shall the contents of any veterinary certificate constitute a warranty condition or other contractual term, description or representation made by DBS. The re-examination procedure in 4.3 will be employed. A Lot may also be Sold Subject To Re-examination or Subject to Re-Examination of Wind only as per 4.1(b) and (c) above in addition to With a Breeding Certificate.

Immediately following DBS being notified that an examination on behalf of a Purchaser is required, the Vendor must present the Lot to The Panel. In the event of the Vendor not making himself available, the Purchaser may elect to cancel the Sale. In the event of the Lot being taken for such examination by either the Purchaser, DBS or their respective agents it nevertheless remains at the sole risk of the Vendor until the completion of the re-examination, and the party taking the Lot shall not be responsible for the death, injury or any damage caused by the Lot or to the Lot while temporarily under its control.

- 4.2 All foals, and yearlings until 15 August will be sold as they stand (4.1a); all yearlings after 15 August and two year olds in the Breeze-Up Sales will be sold subject to re-examination of wind only (4.1c); all mares in foal will be sold subject to re-examination of pregnancy only (4.1e); two year

olds and upwards (with the exception of broodmares) may be sold using any one of the options in 4.1a – 4.1d

Re-examination Procedure

4.3 Where a re-examination by the Panel is permitted the following procedure will be followed:

- (a) The Purchaser will have the right to request the Lot he has purchased to be re-examined by a member of the Panel subject to (b) and (c) below.
- (b) The request for re-examination must be made by the Purchaser in the Auctioneers' Office within 60 minutes of the Sale of the Lot, the Sale time to be solely determined by DBS. Failure to request a re-examination under this Condition will prevent the Purchaser seeking cancellation of the sale for any conditions in 4.4 below.
- (c) The appropriate re-examination fee shall be paid to DBS by the Purchaser. DBS will issue an authority that re-examination of the Lot can then be carried out by a member of the Panel.
- (d) The decision of the Panel shall be final and binding as between the Vendor and Purchaser.
- (e) DBS in no way accept responsibility for the findings of the Panel carrying out the re-examination.

4.4 The sale may be cancelled at the

discretion of the Purchaser if the Panel find the following conditions under each category:

- (a) Sold subject to re-examination (whether with or without a veterinary certificate) (4.1b) – The Lot fails a full clinical examination by the Panel. The examination will not include any radiological or other specialised techniques. It will not be concerned with the accuracy of any other statement concerning any particular Lot whether contained in the catalogue or in any veterinary certificate, save that it shall take into account any qualification contained in a veterinary certificate produced under the terms of 4.1 (b) above.
- (b) Sold subject to re-examination of wind only (4.1c) –
 - (i) The Lot (unless it is a yearling after 15 August or a two year old in the Breeze-Up as in (ii) below) makes an abnormal inspiratory sound when actively exercised on the lunge.
 - (ii) If a yearling (after 15 August) or two year old in the Breeze-Up should make an abnormal inspiratory sound as referred to in (i) above, the Panel shall then, and only then, examine the Lot by endoscope to determine if the Lot is suffering from significant Laryngeal Hemiplegia (paralysis). There are conditions other than Laryngeal Hemiplegia which may be

revealed by endoscope which are not grounds for cancellation of the sale.

(iii) If the Lot, in the opinion of the Panel, is incapable of being lunged in both directions to their satisfaction. In this case, the Vendor will bear the cost of the examination.

- (c) Sold subject to re-examination of pregnancy only (4.1e) – the mare is found to be not in foal.
- (d) Sold with a breeding certificate (4.1f) - The Lot is found by manual examination to be unfit for breeding purposes in the opinion of the Panel.

5 **Drug Testing (Anabolic Steroids and Non-Steroidal Anti-Inflammatory Drugs)**

This Condition applies to all Lots from Yearlings (after 15 August) upwards with the exception of Broodmares that have been covered in that year and Stallions.

- 5.1 The sale may be cancelled at the discretion of the Purchaser in accordance with this Condition if a blood sample taken from the Lot is found to contain the Banned Drugs for which the Purchaser requested a test.
- 5.2 Where a drug referred to in 5.1 above is referred to in a certificate signed by an independent qualified veterinary surgeon and read out by DBS at the Sale, this Condition will apply but the Lot shall not be returnable to the

Vendor unless the Purchaser can demonstrate that additional Banned Drugs (other than those certified and read out) were present at the time of the Sale.

- 5.3 A blood sample will be taken from the Lot where the Purchaser instructs DBS to do so immediately after purchase of the Lot by signing to this effect on the DBS Acknowledgement of Purchase Form. Failure to request a drug test in this way will prevent the Purchaser seeking cancellation of the sale due to the presence of Banned Drugs.
- 5.4 When DBS receive an instruction under 5.3 above, the Vendor shall immediately take the Lot to a designated holding area in accordance with DBS instructions. If the Vendor fails to comply with these instructions, the Purchaser may, at his discretion, cancel the sale.
- 5.5 DBS will deliver the sample to the Irish Equine Centre. Pending the result, the Purchaser must not remove the Lot from the British Isles or Eire, and if they do so will be liable, irrespective of the result, to arrange for and pay the costs of transporting the Lot back to the Vendor. The result of the test will be final and binding on both parties and will be communicated by DBS to the parties in accordance with 15 below as soon as practical after notification.

- 5.6 Where a sample is found to contain Banned Drugs (other than those referred to in 5.2 above), the Purchaser may cancel the sale and return the Lot to the Vendor provided that notification is made in writing to DBS by 5.00 pm on the seventh day after the purchaser was notified by DBS of the result. For the purposes of determining when notification was received, DBS will rely on 15 below.
- 5.7 Failure to return the Lot in accordance with 5.6 above will prevent the Purchaser cancelling the sale under this Condition.
- 5.8 Where the Purchaser elects to cancel the sale in accordance with 5.6 above, the following will happen:
- (a) DBS will give notice to both parties that the sale is cancelled.
 - (b) The Lot will be at the Vendors risk, and the Vendor must arrange and pay for the Lot to be collected.
 - (c) The Vendor will pay the full DBS commission of 7.5% on the purchase price of the Lot as well as any DBS costs and expenses for taking and testing the sample. The Vendor will also indemnify DBS against any claims for costs, damages or expenses arising from the Sale of the Lot.
- 5.9 If after one hour from the delivery of the Lot to the designated holding area a sample has not been taken from the Lot the sale may be cancelled at the Purchaser's discretion.

6 Engagements

When engagements are included in the catalogue or announced at the Sale, it will be assumed that the Lot is being offered for sale with such engagements unless specifically stated to the contrary. It will be the sole responsibility of the Vendor to ensure that the relevant documentation is completed and lodged with the Authority in question, but of the Purchaser to cancel any race entry if a forfeit applies.

7 Private Sales and Transfers

7.1 Any sale concluded on the day of the Sale or within seven days between a Purchaser and a Vendor after the Lot has been unsold at the Sale shall be subject to the DBS Conditions of Sale. Such transactions must be finalised in writing on a Private Sale Form signed by the Vendor, the Purchaser and an authorised representative of DBS. The terms of 9 below will apply to the Purchaser.

7.2 Where DBS accepts the transfer of a Lot from the Purchaser to a third party (the New Purchaser), the appropriate Transfer of Ownership Form must be completed in the Auctioneers' Office. The terms of 9 below will apply to the New Purchaser.

8 Passing of Risk and Title

8.1 The Lot will be at the Vendor's risk at all times until the fall of hammer (or time of sale if sold

privately) when the risk shall pass to the Purchaser subject to 8.2 and 8.3 below.

8.2 Any Lot sold subject to re-examination under the terms of 4.1 above shall be at the Vendor's risk for 60 minutes from the fall of the hammer or, if re-examination is requested, until the completion of the re-examination. Risk remains with the Vendor if the Lot fails the examination and passes to the Purchaser if the Lot passes.

8.3 Any Lot tested for Banned Drugs under the terms of 5 above shall remain at the Vendor's risk from the fall of the hammer until the sample has been taken from the Lot when risk passes to the Purchaser. If the sample proves to be positive for Banned Drugs, risk will pass back to the Vendor when the Vendor is notified.

8.4 Notwithstanding the passing of risk in this Condition or delivery of the Lot to the Purchaser, the Vendor shall retain title to the Lot until the full purchase price has been paid to DBS.

8.5 Where DBS have paid out the Vendor in accordance with 2.8 above, title of the Lot will vest in DBS on the same terms as 8.4 above.

9 Purchasers

9.1 DBS strongly recommend that Purchasers should attend the Sale in person and Purchasers are strongly advised to inspect each

Lot prior to purchase. It is the responsibility of the Purchaser to ensure that he is satisfied with the condition of any Lot before bidding.

9.2 All Lots are sold subject to DBS Conditions of Sale and are subject to any announcements that may be made by the auctioneer. A Vendor may call upon DBS to amend the catalogue description at the Sale and it is the Purchaser's responsibility to ensure he hears any such announcement. The information on the DBS notice board, website and announcement boards in the Sales ring is for guidance only and DBS or the Vendor will not be liable for any error or omission from such information.

9.3 All certificates referred to in the catalogue will be available for inspection in the Auctioneers' Office prior to the Sale.

9.4 Immediately after the purchase of each Lot, the Purchaser must sign the Acknowledgement of Purchase Form confirming the sales details together with his name, address and other details where required by DBS.

9.5 (a) Subject to 9.5(b) and 9.8 below Payment must be made in sterling currency by the Purchaser for each Lot on the day of the Sale and the Lot must be removed by the Purchaser by the close of each day's sale.

(b) DBS may agree to other

payment terms in their discretion and may allow the Purchaser to remove the Lot before full payment has been received.

- (c) No Lot will be raced until it has been paid for in accordance with 9.5(a) above.
- 9.6 It is the sole responsibility of the Purchaser to ascertain whether the Lot is eligible for point to pointing within the meaning of the rules laid down by the BHA.
- 9.7 Where a Purchaser bids or buys on behalf of another, the Purchaser must disclose the name and address of his principal when required by DBS and both the Purchaser and his principal shall be jointly and severally liable under these Conditions.
- 9.8 Where the Purchaser notifies DBS that a Lot has been bought on behalf of another after the Sale and asks DBS to invoice that person (the "Nominee"), DBS (at its absolute discretion) may agree to do so on the basis that the Purchaser (his principal, if any) and the Nominee will be jointly and severally liable to pay the Purchase Price. The Purchaser's payment obligations in respect of the relevant Lot will only be discharged in the event that the Nominee has paid the whole of the Purchase Price. However, where the Nominee pays part of the sum due but the remainder is unpaid, DBS' claim shall be limited to the unpaid sum.

10 DBS' Rights

- 10.1 DBS reserve the right to exclude or remove any person or animal from their premises without giving any reason.
- 10.2 DBS reserve the right, without giving any reason, to reject any or all bids or to withdraw any Lot before or during any Sale.
- 10.3 DBS reserve the right to refuse to offer any Lot or to cancel a sale if the Vendor fails to produce the documentation set out in the Vendors Sale Requirements (Appendix 3) for each Lot.
- 10.4 DBS do not warrant that any Lot is eligible for participation in any Breeders Scheme or Race or the like notwithstanding any announcement or notice in the DBS catalogue or otherwise.
- 10.5 Where any Lot is stabled in the Sales Complex for a period exceeding 2 days on behalf of a Vendor or Purchaser, DBS will charge £25 per day for each horse subject to availability of stables at the discretion of DBS.
- 10.6 DBS may deduct expenses reasonably incurred where any Lot is left with them, returned to them or detained for veterinary inspection, or is the subject of the order of a public, local or other authority, from the proceeds of sale of any Lot.
- 10.7 DBS shall have general lien over all Lots belonging to any Owner, Vendor or Purchaser for any debt

or liability (howsoever arising) of such Owner, Vendor or Purchaser to DBS, and will be entitled without process of Law to sell the Lot by auction or private sale and to apply the net proceeds of such sale in satisfaction of any debt or liability.

10.8 Where any bid has been accepted for any Lot but the Purchaser has not made payment in full in accordance with these Conditions, DBS will have the right, without any process of Law, to recover possession of the Lot(s) and this right will include DBS entering the premises where the Lot is held to recover the Lot. The Lot may be sold and the net proceeds will be applied to the outstanding debt to DBS.

10.9 DBS will not release any Lot from the Sales Complex until a written release form in the form of a pass-out has been issued by DBS.

10.10 DBS accept no liability for the loss or damage to any vehicle which is parked at the owner's entire risk.

10.11 **DBS reserve the right to charge interest on unpaid accounts at 1.5% per month on all accounts which are unpaid 21 days after the last date of the Sale.**

10.12 DBS may sue for the price of the Lot together with any other expenses incurred by them in connection with the Lot where the Purchaser has failed to make payment in accordance with these

Conditions, and the Purchaser will have no right of set off against DBS.

10.13 DBS may at any time, without notice, set off any liability of a Debtor (including but not limited to the outstanding purchase price of any Lot) against any liability of any Associated Company to the Debtor (whether any such liability is present or future, actual or contingent, liquidated or unliquidated and irrespective of the currency of its denomination) and DBS may for such purpose convert or exchange any currency.

10.14 Any exercise by DBS of its rights under Condition 10.13 shall be without prejudice to any other rights or remedies available to DBS under these Conditions or otherwise.

11-13 Disputes Procedure

11 Complaints Procedure

The Complaints Procedure deals exclusively with the conditions in 12 below. For the avoidance of doubt, the clinical examinations in 4 above do not apply to this clause as those examinations must be dealt with on the day of the Sale by the Panel.

11.1 A Purchaser wishing to invoke this Condition must do so by informing DBS in writing by **5.00pm on the seventh calendar day after the Lot was purchased (third calendar day in the case**

- of Condition 12.1(i)) giving specific details of their complaint, supported by a certificate signed by an independent qualified veterinary surgeon (or independent professional/ international rider in the case of Condition 12.1(i)).
- 11.2 Any complaint made by the Purchaser to DBS under 12.2 below must be supported by a certificate signed by an independent qualified veterinary surgeon within the time limit specified under 11.1 above.
- 11.3 The complaint shall be dealt with by DBS, or their appointee, (which may be a veterinary surgeon or professional/international rider or other deemed appropriate by DBS) at such time, at such place and in such manner as DBS deems appropriate. It shall be the responsibility of all parties to supply all relevant information to DBS in order that the complaint may be adjudicated. The decision of DBS, or their appointee, on the complaint, which will be delivered without reasons, shall be final and binding on both the Vendor and the Purchaser. DBS may have the Lot examined by their appointee and where the opinion of their appointee does not agree with the opinion of the Purchaser's appointee as expressed in his certificate furnished, then the opinion of the DBS appointee shall prevail and shall be final and binding on the parties.
- 11.4 DBS commission and all expenses deemed reasonable by DBS will be paid by the unsuccessful party. This will include expenses incurred by DBS in dealing with any complaint and expenses incurred by the successful party from the fall of hammer until the conclusion of the dispute. If the Lot is collected by the Vendor from the Purchaser he is deemed to be the unsuccessful party having given up the right of independent adjudication.
- 11.5 No complaint under this Condition will be dealt with by DBS if the Lot has been taken out of the British Isles or Eire.
- 11.6 For the avoidance of doubt risk remains with the Purchaser throughout any complaint and only passes back to the Vendor when both parties are notified of DBS decision to cancel the sale (if appropriate).
- 12 Lots Returnable**
- The Complaints Procedure set out in 11 above will only apply if the information in 12.1 below is not stated in the catalogue or announced at the Sale or if the conditions in 12.2 below are not declared in the catalogue or are not announced without qualification at the Sale. In these cases, the sale may be cancelled at the discretion of the Purchaser.
- 12.1 (a) The Lot is not registered with a Stud Book Authority approved

by the International Stud Book Committee.

- (b) The Pedigree or description of the Lot does not correspond with the Pedigree or description as stated in the catalogue.
- (c) The Lot is described as a Colt and does not at such time have both testes palpable (this provision is to apply only to any horse offered for sale after the 15 August of their yearling year).
- (d) The Lot has run at an unrecognised meeting or is on the forfeit list maintained by a Recognised Turf Authority.
- (e) The Lot is the subject of a Starting Stalls Test as ordered by the Stewards of the BHA.
- (f) A Broodmare/Filly has been covered and/or subsequent to any covering slipped the foal.
- (g) Has significantly impaired vision or serious injury to the eye likely to affect it's usefulness.
- (h) The Lot is described as unbroken and has been broken and ridden prior to the sale. For the avoidance of doubt a Lot described as driven in long reins will not be returnable under this Condition.
- (i) The Lot is described as untried and has been tried prior to Sale in the opinion of DBS or their

appointee. A Lot will be deemed tried if it

- i. has run in any race
- ii. has been catalogued in any previous Breeze-Up Sale
- iii. has appeared on any published Trainer's or Permit Holder's List
- iv. has been galloped "upsides" prior to Sale and that this can be proven beyond reasonable doubt to the satisfaction of DBS
- v. is deemed to have been broken & tried prior to Sale to the satisfaction of DBS appointee taking all matters into consideration

12.2 The Lot:

- (a) has been tubed or otherwise operated on for unsoundness in wind;
- (b) has been unnerved;
- (c) is a wind-sucker (i.e. frequently swallows air whether in association with grasping fixed objects with incisor teeth or not; a crib-biter is not returnable unless the crib-biting is associated with a frequent wind-sucking, in which case the Lot is returnable as a wind-sucker);
- (d) has been operated upon for wind-sucking or crib-biting;
- (e) is a frequent weaver; (i.e. frequently swing its head and

neck to and fro and transfers weight from one forelimb to the other alternatively).

(f) is a frequent boxwalker; (i.e. frequently walks either backwards and forwards or round and round the box repeatedly in an aimless manner).

(g) is a wobbler

13 Disputes

13.1 Any dispute arising out of the sale of any Lot in accordance with these Conditions of Sale shall be a dispute between the Vendor and the Purchaser and in no circumstances shall DBS be liable to either party in connection with such dispute.

13.2 Where DBS are brought in as a party to any dispute despite 13.1 above, DBS will be entitled to payment of their legal and other expenses on a full indemnity basis from the party who joins them in.

14 Safety

14.1 Every person on DBS premises before, during or after the Sale shall be deemed to be there at their own risk and shall have no claim against DBS in respect of any injury sustained or any loss or damage to property which may occur from any cause whatsoever save that nothing in this sub-clause shall be taken to exclude or restrict liability for death or personal injury arising from DBS' negligence.

14.2 DBS accept no liability for any loss or injury caused to or by any Lot whilst he is being moved by their employees or agents premises during the conduct of the Sale or by disease, accident or otherwise save that nothing in this sub-clause shall be taken to exclude or restrict liability for death or personal injury arising from DBS' negligence.

14.3 All Lots must wear a headcollar at all times on DBS premises. Where a Vendor is found to have left a Lot without a headcollar after the Sale, DBS will supply a headcollar at the Vendor's expense.

14.4 If any Lot is ridden at any time in conjunction with the Sale, the rider must wear an BHA approved helmet and body protector, and it shall be the responsibility of the Vendor or Purchaser to ensure that they, their employees or agents, adhere to this Condition.

14.5 Children under the age of 5 years will not be admitted to the Sales Complex in the interest of safety.

14.6 Dogs will not be permitted in the Sales Complex.

15-16 General

15 Notices

When any certificate or notice is required to be given to DBS under these Conditions of Sale, it must be made in writing and sent by first class post or facsimile to the DBS Hawick Office or emailed to winners@goffsdbs.com. Any notice

required to be given by DBS to the Vendor or the Purchaser shall be sent to the address given on the Entry Form or the Acknowledgement of Purchase Form. Such notice shall be deemed given on the date of delivery or the second day after posting or on the day of transmission depending whether the notice is sent by hand, post, fax or email.

16.5 The submission to the jurisdiction of the Courts of England and Wales shall not limit the right of DBS to take proceedings against the Owner, the Vendor or the Purchaser in any other Court of competent jurisdiction and the taking of proceedings in one or more jurisdictions shall not preclude the taking of proceedings in any other jurisdiction whether concurrently or not.

16

- 16.1 DBS reserve the right to add, cancel, alter or otherwise modify these Conditions of Sale.
- 16.2 These Conditions of Sale form the entirety of the agreement between DBS, the Owner, the Vendor and the Purchaser and no variation shall be valid or binding unless specifically authorised in writing by two Executive Directors of DBS.
- 16.3 These Conditions of Sale are to be construed and shall take effect in accordance with English Law and shall be subject to the exclusive jurisdiction of the Courts of England and Wales.
- 16.4 The Owner, the Vendor and the Purchaser agree for the exclusive benefit of DBS that these Conditions of Sale shall be subject to the non-exclusive jurisdiction of the Courts of England and Wales and, for such purpose, irrevocably submit to the non-exclusive jurisdiction of those Courts.