

# IT'S ALL IN THE FAMILY – Kathleen Irwin



**Pluck's** full brother was born last weekend at Denali Stud, but whereas Pluck is practically black, the new brother is chestnut. Further confusing the issue is that the parents are both dark brown in color. How did the baby end up chestnut?

The simple answer is as follows. Each horse possesses two color-determining genes. It got one from each parent. The baby will exhibit the color which is the dominant of these two genes.

In the following explanation, the term “bay” encompasses bay, brown and black, which are variations of the same dark color gene.

If the baby gets two bay genes, it will exhibit the bay color. If it gets two chestnut genes, it will exhibit the chestnut color. BUT, if it gets one bay gene and one chestnut gene, it will exhibit the bay color, because bay is dominant over chestnut.

Pluck's Brother (chestnut)	MORE THAN READY (brown)	SOUTHERN HALO (bay)	HALO (black)
		WOODMAN'S GIRL (bay)	NORTHERN SEA (bay)
		FORT WOOD (bay)	WOODMAN (chestnut)
	SECRET HEART (bay)	SECRET PACT (bay)	BECKY BE GOOD (bay)
			SADLER'S WELLS (bay)
			FALL ASPEN (chestnut)
			BUSH TELEGRAPH (bay)
			SOHO SECRET (chestnut)

Below is another example of a famous chestnut horse whose nearest chestnut ancestor was found three generations earlier:

Secretariat (chestnut)	BOLD RULER (brown)	NASRULLAH (bay)	NEARCO (brown)
		MISS DISCO (bay)	MUMTAZ BEGUM (grey)
		PRINCEQUILLO (bay)	DISCOVERY (chestnut)
	SOMETHINGROYAL (bay)	IMPERATRICE (bay)	OUTDONE (bay)
			PRINCE ROSE (bay)
			COSQUILLA (bay)
			CARUSO (bay)
			CINQUEPACE (bay)

Grey is another fun genetic factor. Look for a forthcoming article “The Genetics of Grey” in a future edition of the *Insiders' Bulletin*.