Colour Charts

What colour calves to expect? With Heterozygous Black ($E^D/-$)

Sire / Dam Colour	Red	Yellow	White	Black *	Dun *	Silver *
Red	*Red - 100%*	*Red – 50%* *Yellow - 50%*	*Yellow - 100%*	*Red – 50%* *Black - 50%*	*Red – 25%* *Yellow – 25%* *Black – 25%* *Dun - 25%*	*Yellow – 50%* *Dun - 50%*
Yellow	*Red – 50%* *Yellow - 50%*	*Red – 25%* *Yellow – 50%* *White - 25%*	*Yellow – 50%* *White - 50%*	*Red – 25%* *Yellow – 25%* *Black – 25%* *Dun - 25%*	*Red – 12.5%* *Yellow – 25%* *White – 12.5%* *Black – 12.5%* *Dun – 25%* *Silver - 12.5%*	*Yellow – 25%* *White – 25%* *Dun – 25%* *Silver - 25%*
White	*Yellow - 100%*	*Yellow – 50%* *White - 50%*	*White - 100%*	*Yellow – 50%* *Dun - 50%*	*Yellow – 25%* *White – 25%* *Dun – 25%* *Silver - 25%*	*White – 50%* *Silver - 50%*
Black *	*Red – 50%* *Black - 50%*	*Red – 25%* *Yellow – 25%* *Black – 25%* *Dun - 25%*	*Yellow – 50%* *Dun - 50%*	*Red – 25%* *Black – 75%*	*Red – 12.5%* *Yellow – 12.5%* *Black – 37.5%* *Dun - 37.5%*	*Yellow – 25%* *Dun - 75%*
Dun *	*Red – 25%* *Yellow – 25%* *Black – 25%* *Dun - 25%*	*Red – 12.5%* *Yellow – 25%* *White – 12.5%* *Black – 12.5%* *Dun – 25%* *Silver - 12.5%*	*Yellow – 25%* *White – 25%* *Dun – 25%* *Silver - 25%*	*Red – 12.5%* *Yellow – 12.5%* *Black – 37.5%* *Dun - 37.5%*	*Red – 6.25%* *Yellow – 12.5%* *White – 6.25%* *Black – 18.75%* *Dun – 37.5%* *Silver - 18.75%*	*Yellow – 12.5%* *White – 12.5%* *Dun – 37.5%* *Silver - 37.5%*
Silver *	*Yellow – 50%* *Dun - 50%*	*Yellow – 25%* *White – 25%* *Dun – 25%* *Silver - 25%*	*White – 50%* *Silver - 50%*	*Yellow – 25%* *Dun - 75%*	*Yellow – 12.5%* *White – 12.5%* *Dun – 37.5%* *Silver - 37.5%*	*White – 25%* *Silver - 75%*

* Assuming black, dun, and silver are heterozygous ($E^D/-$)

What colour calves to expect? With Homozygous Black (E^D/E^D)

Sire / Dam Colour	Red	Yellow	White	Black *	Dun *	Silver *
Red	*Red - 100%*	*Red – 50%* *Yellow - 50%*	*Yellow - 100%*	*Black - 100%*	*Black – 50%* *Dun - 50%*	*Dun - 100%*
Yellow	*Red – 50%* *Yellow - 50%*	*Red – 25%* *Yellow – 50%* *White - 25%*	*Yellow – 50%* *White - 50%*	*Black – 50%* *Dun - 50%*	*Black – 25%* *Dun – 50%* *Silver - 25%*	*Dun – 50%* *Silver - 50%*
White	*Yellow - 100%*	*Yellow – 50%* *White - 50%*	*White - 100%*	*Dun - 100%*	*Dun – 50%* *Silver - 50%*	*Silver - 100%*
Black *	*Black - 100%*	*Black – 50%* *Dun - 50%*	*Dun - 100%*	*Black – 100%*	*Black – 50%* *Dun - 50%*	*Dun - 100%*
Dun *	*Black – 50%* *Dun - 50%*	*Black – 25%* *Dun – 50%* *Silver - 25%*	*Dun – 50%* *Silver - 50%*	*Black – 50%* *Dun - 50%*	*Black – 25%* *Dun – 50%* *Silver - 25%*	*Dun – 50%* *Silver - 50%*
Silver *	*Dun - 100%*	*Dun – 50%* *Silver - 50%*	*Silver - 100%*	*Dun - 100%*	*Dun – 50%* *Silver - 50%*	*Silver - 100%*

* Assuming black, dun, and silver are homozygous (E^D/E^D)

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For a more detailed coverage of Highland coat colours and the genes controlling them, see the articles on .....
Dr. Glen Hastie's website — Bairnsley Highlands