

WHAT CAN I BREED TO...?

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PURPOSE OF THIS CHART: Is to help those who are learning about genetics learn what colors are “safe” to breed to each other without being technical. It is based on Holland Lop colors as far as what is showable and not showable. However, the genetics holds true across-breeds and so just ignore non-showable notes if in your breed, they are showable. It is also written in the idea to get the most of your color genes in your litters, hence notes such as “well x color is fine, but you will likely not get anything but torts then” which I assume if a Holland breeder is reading this and working with color, then that is not what they are aiming for. Of course, never forget to be concerned about type as well as color!

HOW THIS CHART WORKS: Look on the far-left column, find the color of the buck (or doe) that you would like to breed. The next column has the best case scenarios of colors to breed to that rabbit. In parentheses after the color, in black are the known color outcomes, maroon are some of the possible outcomes that are more common (i.e. more are possible) but depend on what your rabbits might carry. The next column has colors that you could breed, but might not be the best – the “Possible Problems” explain why. The “notes” column explains a bit about breeding that particular color. For the lilac varieties, I left out possible colors because you just have to look at the two previous rows to find the possibilities. Of course, there are many combinations not listed and some breeders might opt to stray from this chart for specific purposes, such as working on a new(er) color. This is not a be-all-and-end-all chart.

COLOR (blue = not showable)	GOOD TO BREED	FINE BUT NOT OPTIMAL	POSSIBLE PROBLEMS	NOTES
Black	Chestnut (Chestnut, black, opal, blue) Opal (Chestnut, black, blue, opal) Black (black, blue), blue (black, blue) chocolate (black, blue, chocolate, lilac), lilac (black, blue, chocolate, lilac), any tort (black, blue, tort, blue tort), any otter (black, black otter, blue, blue otter),	Sable Point (black, sable point, siamese sable) Siamese Sable (black, sable point, siamese sable) Smoke Pearl (black, sable point, siamese sable, smoke pearl)	None really, just don't see the point unless you know the black carries something so you can get the sable points and siamese sables.	

	any marten (black, black otter, blue, blue otter, marten, blue marten)			
Blue	Chestnut (Chestnut, black, opal, blue) Opal (Opal, blue) Black (black, blue), blue (blue) chocolate (black, blue, chocolate, lilac), lilac (blue, lilac), any tort (blue, blue tort), any otter (black, black otter, blue, blue otter), any marten (black, black otter, blue, blue otter, marten, blue marten)	Sable Point (black, sable point, siamese sable) Siamese Sable (black, sable point, siamese sable) Smoke Pearl (blue, sable point, siamese sable, smoke pearl)	Watch with the sable points that you don't get blue points, which aren't showable	
Chocolate	Chestnut (Chestnut, black, opal, blue) Opal (Chestnut, black, opal, blue, chocolate chestnut, chocolate) Chocolate Chestnut (Chocolate chestnut, chocolate) Black (black, blue), blue (black, blue, chocolate, lilac, and torts of these) chocolate (black, blue, chocolate, lilac, torts of these), lilac (blue, lilac, torts of these), any tort (black, blue, blue tort, tort, chocolate, chocolate tort), any otter (black, black otter, blue, blue otter, chocolate otter, chocolate)	Lynx, any marten	Lynx are better bred to agoutis, because they are so hard to find staying away from the self gene is best.	Wouldn't breed to any sable point, siamese sable, or smoke pearl because no chocolate versions of them are recognized.
Lilac	Black, Blue, Chocolate, Lilac, Chestnut, Opal, Chocolate Chestnut, any color tort, any color otter	Lynx, any marten	Lynx are better bred to agoutis, because they are so hard to find staying away from the self gene is best, HOWEVER with a lilac it would be worth it IMO because even if the lynx carries self, ½ the litter will be lynx and the other ½ lilac!	
Tort (Black Tort)	Black (Black, blue, tort, blue tort), Blue (black, blue, tort, blue tort), Chocolate (black, tort), Lilac (black,	Sable Point, Siamese Sable, Smoke Pearl	I don't see the point unless you know the tort carries something so you can get the	Please don't breed any tort to otters, because that puts

	tort, blue tort, chocolate, chocolate tort, blue, lilac, lilac tort), Tort (tort, blue tort), Blue Tort (tort, blue tort), Chocolate Tort (tort, blue tort, chocolate tort, lilac tort), Lilac Tort (tort, blue tort, chocolate tort, lilac tort), Chestnut (Chestnut, black, tort), Opal (chestnut, opal, black, blue, tort, blue tort)		sable points and siamese sables.	the genes into the lines to give you tort otters, which aren't showable and not really wanted as it messes up the color.
Blue Tort	Black (Black, blue, tort, blue tort), Blue (blue, blue tort), Chocolate (black, tort), Lilac (blue, blue tort, chocolate, chocolate tort, lilac, lilac tort), Tort (tort, blue tort), Blue Tort (blue tort), Chocolate Tort (tort, blue tort, chocolate tort, lilac tort), Lilac Tort (blue tort, chocolate tort, lilac tort), Chestnut (Chestnut, black, tort), Opal (opal, blue tort)	Sable Point, Siamese Sable, Smoke Pearl	None really, just don't see the point unless you know the blue tort carries something so you can get the sable points and siamese sables.	
Chocolate Tort	Black (Black, blue, tort, blue tort), Blue (black, blue, tort, blue tort), Chocolate (chocolate, chocolate tort), Lilac (chocolate, blue tort, chocolate, chocolate tort, blue, lilac, lilac tort), Tort (tort, blue tort, chocolate tort), Blue Tort (tort, blue tort, chocolate tort, lilac tort), Chocolate Tort (chocolate tort, lilac tort), Lilac Tort (chocolate tort, lilac tort), Chestnut (Chestnut, black, tort), Opal (chestnut, opal, black, blue, tort, blue tort)			Wouldn't breed to any sable point, siamese sable, or smoke pearl because no chocolate versions of them are recognized.
Lilac Tort	Black, Blue, Chocolate, Lilac, Tort, Blue Tort, Chocolate Tort, Lilac Tort, Chestnut, Opal			
Chestnut (Agouti)	Black (Chestnut, Black, blue, tort,	Tri-Colors	Issue with tri's is that unless	

	<p>blue tort), Blue (Chestnut, black, blue, tort, blue tort), Chocolate (Chestnut, black, tort), Lilac (Chestnut, black, tort, blue tort, chocolate, chocolate tort, blue, lilac, lilac tort), Tort (Chestnut, tort, blue tort), Blue Tort (Chestnut, tort, blue tort), Chocolate Tort (Chestnut, tort, blue tort, chocolate tort, lilac tort), Lilac Tort (Chestnut, tort, blue tort, chocolate tort, lilac tort), Chestnut (Chestnut, black, tort), Opal (chestnut, opal, black, blue, tort, blue tort)</p>		<p>the chestnut carries a certain gene, you won't get tri's in the litter. However, at least the chestnut has the agouti gene which is needed for correctly colored tri's.</p>	
Opal (Dilute/Blue Agouti)	<p>Black (Chestnut, blue, opal tort, blue tort), Blue (Opal, blue, blue tort), Chocolate (Chestnut, black, tort), Lilac (Opal, blue, blue tort, chocolate, chocolate tort, lilac, lilac tort), Tort (chestnut, tort, blue tort), Blue Tort (opal, blue tort), Chocolate Tort (chestnut, tort, blue tort, chocolate tort, lilac tort), Lilac Tort (opal, blue tort, chocolate tort, lilac tort), Chestnut (Chestnut, black, tort), Opal (opal, blue tort)</p>	Tri-colors	<p>Issue with tri's is that unless the chestnut carries a certain gene, you won't get tri's in the litter. However, at least the chestnut has the agouti gene which is needed for correctly colored tri's.</p>	
Chocolate Agouti (Chocolate Chestnut)	<p>Chestnut (Chestnut, black, opal, blue) Opal (Chestnut, black, opal, blue, chocolate chestnut, chocolate) Chocolate Agouti (Chocolate Agouti, chocolate, chocolate tort) Black (Chestnut, black, blue), blue (Chestnut, black, blue, chocolate, lilac, and torts of these) chocolate (chocolate agouti, black, blue, chocolate, lilac, torts of these), lilac</p>	Tri-Colors	<p>Issue with tri's is that unless the chestnut carries a certain gene, you won't get tri's in the litter. However, at least the chestnut has the agouti gene which is needed for correctly colored tri's.</p>	

	(chestnut, chocolate agouti, blue, lilac, torts of these), any tort (chestnut, black, blue, blue tort, tort, chocolate, chocolate tort)			
Lynx (lilac agouti)	Chestnut (Chestnut, Opal, Chocolate Chestnut, Lynx), Opal (Opal, Lynx), Chocolate Agouti (Chocolate Agouti, Lynx), Lynx (Lynx)	Black (Chestnut, black, blue, opal), blue (opal, blue), chocolate (chocolate agouti, opal, lynx, blue), lilac (lynx, lilac)	Watch that you don't get the self gene in there too much and start losing the lynx	Lynx should NOT be breed to torts, it is best to keep them with other agoutis, using selfs isn't too bad but it's not optimal.
Chinchilla	Chinchilla (Chinchilla, squirrel), Squirrel (Chinchilla, squirrel), Chocolate Chinchilla (chinchilla, squirrel, chocolate chin), Frosty (Chinchilla, Frosty, squirrel), REW (chinchilla)			It is best to keep chins with chins or REW
Squirrel (blue chinchilla)	Chinchilla (Chinchilla, squirrel), Squirrel (squirrel), Chocolate Chinchilla (chinchilla, squirrel, chocolate chin), Frosty (Chinchilla, Frosty, squirrel), REW (chinchilla, squirrel)			It is best to keep chins with chins or REW
Chocolate Chinchilla	Chinchilla (Chinchilla, squirrel, chocolate chin), Squirrel (Chinchilla, squirrel, chocolate chin, lilac chin), Chocolate Chinchilla (chocolate chin, lilac chin), Frosty (Chinchilla, Frosty, squirrel), REW (chinchilla)			It is best to keep chins with chins or REW

<p>Lilac Chinchilla</p>	<p>Chinchilla, Squirrel, Chocolate Chinchilla, Frosty , REW</p>			<p>It is best to keep chins with chins or REW</p>
<p>Sable Chinchilla</p>		<p>Sable point (sable chin, siamese sable, sable point), siamese sable (sable chin, siamese sable, sable point), smoke pearl (sable chin, siamese sable, sable point, smoke pearl)</p>		<p>Sable chins are a hard one to use, they don't really fit and you always risk getting lots of sable chins in the litter.</p>
<p>Iron Gray (an iron gray is a chin based sable point)</p>	<p>Chinchilla (Chinchilla, frosty), Squirrel (Chinchilla, squirrel, frosty), Chocolate Chinchilla (chinchilla, frosty), Frosty (Frosty, squirrel), REW (lots of possibilities)</p>			<p>Iron gray is very pretty but you can get the self into the chin lines by using it, which could cause problems down the road if you aren't careful and don't want to be stuck with a lot of unshowable Iron Gray rabbits!</p>
<p>Black/Orange Tri-Color **Tri is the broken version of harlequin, so any time I only mention one, you can also substitute the other for a possible breeding color** ***"black tri" is just the shortened version (same format for other varieties)**</p>	<p>Black tri (black tri, blue tri, orange, cream), Blue tri (black tri, blue tri, orange, cream), Chocolate Tri (black tri, orange), Lilac Tri (black tri, orange, cream, blue tri), Orange (black tri, orange, fawn, cream), Fawn (black tri, orange, fawn, cream), Cream (black tri, orange, fawn, cream, blue tri)</p>	<p>Torts</p>	<p>Be careful with using torts! Lots of times they will help with the type, but it will ruin the coloring by causing "self" or "torted" tri's that are not showable. Only use them with good reason please and cull the selfs! (you will know if you see one – they look like a bkn tort with darker spots usually, sometimes you don't even see spots!)</p>	

<p>Blue/Fawn Tri-Color</p> <p>**Tri is the broken version of harlequin, so any time I only mention one, you can also substitute the other for a possible breeding color**</p>	<p>Black tri (black tri, blue tri, orange, cream), Blue tri (blue tri, orange, cream), Chocolate Tri (black tri, orange, blue tri, lilac tri), Lilac Tri (blue tri, cream, lilac tri), Orange (black tri, orange, fawn, cream, blue tri), Fawn (black tri, orange, fawn, cream, blue tri), Cream (blue tri, orange, fawn, cream)</p>	<p>Torts</p>	<p>Be careful with using torts! Lots of times they will help with the type, but it will ruin the coloring by causing “self” or “torted” tri’s that are not showable. Only use them with good reason please and cull the selfs! (you will know if you see one – they look like a bkn tort with darker spots usually, sometimes you don’t even see spots!)</p>	
<p>Chocolate/Orange Tri-Color</p> <p>**Tri is the broken version of harlequin, so any time I only mention one, you can also substitute the other for a possible breeding color**</p>	<p>Black tri (black tri, blue tri, orange, cream), Blue tri (black tri, blue tri, orange, cream), Chocolate Tri (chocolate tri, chocolate factored orange, lilac tri), Lilac Tri (chocolate tri, chocolate factored orange or cream, lilac tri), Orange (black tri, orange, fawn, cream), Fawn (black tri, orange, fawn, cream), Cream (black tri, orange, fawn, cream, chocolate tri, blue tri, lilac tri)</p>	<p>Torts</p>	<p>Be careful with using torts! Lots of times they will help with the type, but it will ruin the coloring by causing “self” or “torted” tri’s that are not showable. Only use them with good reason please and cull the selfs! (you will know if you see one – they look like a bkn tort with darker spots usually, sometimes you don’t even see spots!)</p>	
<p>Lilac/Fawn Tri-Color</p> <p>**Tri is the broken version of harlequin, so any time I only mention one, you can also substitute the other for a possible breeding color**</p>	<p>Black tri, blue tri, chocolate tri, lilac tri, orange, fawn, cream</p>	<p>Torts</p>	<p>Be careful with using torts! Lots of times they will help with the type, but it will ruin the coloring by causing “self” or “torted” tri’s that are not showable. Only use them with good reason please and cull the selfs! (you will know if you see one – they look like a bkn tort with darker spots usually, sometimes you don’t even see spots!)</p>	

<p>Black/Orange Harlequin</p>	<p>Black tri (black tri, blue tri, orange, cream), Blue tri (black tri, blue tri, orange, cream), Chocolate Tri (black tri, orange), Lilac Tri (black tri, orange, cream, blue tri), Orange (black tri, orange, fawn, cream), Fawn (black tri, orange, fawn, cream), Cream (black tri, orange, fawn, cream, blue tri)</p>	<p>Torts</p>	<p>Be careful with using torts! Lots of times they will help with the type, but it will ruin the coloring by causing “self” or “torted” tri’s that are not showable. Only use them with good reason please and cull the selfs! (you will know if you see one – they look like a bkn tort with darker spots usually, sometimes you don’t even see spots!)</p>	
<p>Blue/Fawn Harlequin</p>	<p>Black tri (black tri, blue tri, orange, cream), Blue tri (blue tri, orange, cream), Chocolate Tri (black tri, orange, blue tri, lilac tri), Lilac Tri (blue tri, cream, lilac tri), Orange (black tri, orange, fawn, cream, blue tri), Fawn (black tri, orange, fawn, cream, blue tri), Cream (blue tri, orange, fawn, cream)</p>	<p>Torts</p>	<p>Be careful with using torts! Lots of times they will help with the type, but it will ruin the coloring by causing “self” or “torted” tri’s that are not showable. Only use them with good reason please and cull the selfs! (you will know if you see one – they look like a bkn tort with darker spots usually, sometimes you don’t even see spots!)</p>	
<p>Chocolate/Orange Harlequin</p>	<p>Black tri (black tri, blue tri, orange, cream), Blue tri (black tri, blue tri, orange, cream), Chocolate Tri (chocolate tri, chocolate factored orange, lilac tri), Lilac Tri (chocolate tri, chocolate factored orange or cream, lilac tri), Orange (black tri, orange, fawn, cream), Fawn (black tri, orange, fawn, cream), Cream (black tri, orange, fawn, cream, chocolate tri, blue tri, lilac tri)</p>	<p>Torts</p>	<p>Be careful with using torts! Lots of times they will help with the type, but it will ruin the coloring by causing “self” or “torted” tri’s that are not showable. Only use them with good reason please and cull the selfs! (you will know if you see one – they look like a bkn tort with darker spots usually, sometimes you don’t even see spots!)</p>	

Lilac/Fawn Harlequin	Black tri, blue tri, chocolate tri, lilac tri, orange, fawn, cream	Torts	Be careful with using torts! Lots of times they will help with the type, but it will ruin the coloring by causing “self” or “torted” tri’s that are not showable. Only use them with good reason please and cull the selfs! (you will know if you see one – they look like a bkn tort with darker spots usually, sometimes you don’t even see spots!)	
Black/White Magpie				Please cull magpies, they just mess up the tri color and are not really useful and any breeding program and they aren’t showable on top of that!

Blue/White Magpie				Please cull magpies, they just mess up the tri color and are not really useful and any breeding program and they aren't showable on top of that!
Chocolate/White Magpie				Please cull magpies, they just mess up the tri color and are not really useful and any breeding program and they aren't showable on top of that!
Lilac/White Magpie				Please cull magpies, they just mess up the tri color and are not really useful and any breeding program and they aren't showable on top of that!
Black Pointed White	Black pw (black pw, REW), blue pw (black pw, blue pw, REW) choco pw (black pw, blue pw, choco pw, lilac pw, REW) lilac pw (black pw, blue pw, choco pw, lilac pw, REW), REW (black pw, blue/choco/lilac pw, REW)	Siamese sable (black pw, siamese sable, REW) smoke pearl (black pw, siamese sable, blue pw, smoke pearl, REW)	The problem with siamese sables and sable points is that the c(chl) gene is dominant to the pointed white (c(h)) gene so you can cover it up. Other than that, there isn't really an issue.	

Blue Pointed White	Black pw (black pw, REW), blue pw (blue pw, REW) choco pw (black pw, blue pw, choco pw, lilac pw, REW) lilac pw (blue pw, choco pw, lilac pw, REW), REW (black/blue/choco/lilac pw, REW)	Siamese sable (black pw, siamese sable, REW) smoke pearl (blue pw, smoke pearl, REW)	The problem with siamese sables and sable points is that the c(chl) gene is dominant to the pointed white (c(h)) gene so you can cover it up. Other than that, there isn't really an issue.	
Chocolate Pointed White	Black pw (black pw, REW, choco pw), blue pw (black pw, blue pw, choco pw, lilac pw, REW) choco pw (chocolate pw, lilac pw, REW) lilac pw (choco pw, blue pw, lilac pw, REW), REW (black pw, blue/choco/lilac pw, REW)	Siamese sable (black pw, siamese sable, REW) smoke pearl (black pw, siamese sable, blue pw, smoke pearl, REW)	The problem with siamese sables and sable points is that the c(chl) gene is dominant to the pointed white (c(h)) gene so you can cover it up. Other than that, there isn't really an issue.	
Lilac Pointed White	Black pw (black pw, REW), blue pw (blue pw, REW) choco pw (choco pw, blue pw, lilac pw, REW) lilac pw (lilac pw, REW), REW (black/blue/choco/lilac pw, REW)	Siamese sable (black pw, siamese sable, REW) smoke pearl (blue pw, smoke pearl, REW)	The problem with siamese sables and sable points is that the c(chl) gene is dominant to the pointed white (c(h)) gene so you can cover it up. Other than that, there isn't really an issue.	
Blue Eyed White	Blue-Eyed-White (BEW)	Selves, torts, agoutis...they'll just carry the vienna white gene (i.e. BEW carries which can be "BEW sports")		BEW's are just best kept bred to BEW's Never breed to REW!
Ruby Eyed White	REW (REW), sable point (REW, siamese sable, sable point), siamese sable (REW, siamese sable, sable point), smoke pearl (REW, siamese sable, sable point, smoke pearl) Chinchilla (chin, REW), squirrel (chin, REW, squirrel)	Any other color – they will just carry REW is all.		The best options for breeding REW's with depends on what else it carries. For example, if it has agouti behind it, keeping it with Chins and other REW's is a good idea. If it has self behind it, then the

				shadeds such as sable points and sables are your best bet.
Sable Point	REW (REW), sable point (REW, sable point), siamese sable (REW, seal, siamese sable, sable point), smoke pearl (REW, seal, siamese sable, blue seal, sable point, smoke pearl)	Torts	What's the fun of breeding them to torts? Unless the tort carries REW or light chin from a previous sable point or siamese sable on the pedigree, nothing exciting happens.	
Blue Point	REW (REW), sable point (REW, sable point, blue point), siamese sable (REW, seal, siamese sable, sable point, smoke pearl), smoke pearl (REW, smoke pearl, blue seal, siamese sable, sable point)	Torts	What's the fun of breeding them to torts? Unless the tort carries REW or light chin from a previous sable point or siamese sable on the pedigree, nothing exciting happens.	You can breed to blue points, chocolate points, or lilac points, but since all of those are non-showable I am assuming you won't.
Chocolate Point	REW (REW), sable point (REW, sable point), siamese sable (REW, seal, siamese sable, sable point), smoke pearl (REW, seal, siamese sable, sable point, smoke pearl)	Torts	What's the fun of breeding them to torts? Unless the tort carries REW or light chin from a previous sable point or siamese sable on the pedigree, nothing exciting happens.	You can breed to blue points, chocolate points, or lilac points, but since all of those are non-showable I am assuming you won't.
Lilac Point	REW (REW), sable point (REW, siamese sable, sable point, blue point, lilac point, chocolate point), siamese sable (REW, siamese sable, sable point), smoke pearl (REW, siamese sable, smoke pearl)	Torts	What's the fun of breeding them to torts? Unless the tort carries REW or light chin from a previous sable point or siamese sable on the pedigree, nothing exciting happens.	You can breed to blue points, chocolate points, or lilac points, but since all of those are non-showable I am assuming you won't.
Siamese Sable	REW (REW), sable point (REW, siamese sable, seal, sable point),	Torts	What's the fun of breeding them to torts? Unless the tort	

	siamese sable (REW, seal, siamese sable, sable point), smoke pearl (REW, seal, siamese sable, blue seal, sable point, smoke pearl, blue point)		carries REW or light chin from a previous sable point or siamese sable on the pedigree, nothing exciting happens.	
Smoke Pearl	REW (REW), sable point (REW, siamese sable, seal, sable point, smoke pearl, blue point), siamese sable (REW, seal, siamese sable, sable point, blue point, smoke pearl), smoke pearl (REW, smoke pearl, blue seal, sable point, blue point)	Torts	What's the fun of breeding them to torts? Unless the tort carries REW or light chin from a previous sable point or siamese sable on the pedigree, nothing exciting happens.	
Seal (note: blue seal is just the dilute version of seal, if the eyes are blue-gray it will not be showable, but usually the color is so dense that they look like normal seals with brown eyes even.)	REW, sable point (, siamese sable, seal, sable point), siamese sable (seal, siamese sable, sable point), smoke pearl (seal, siamese sable, blue seal, sable point, smoke pearl, blue point)			
Gold Tipped Steel (GTS) ** By any agouti I mean chestnut, opal, chocolate agouti, or lilac agouti. Any steel means any of the 8 steel varieties**	Chestnut (GTS, Chestnut, steels and agoutis), Opal (GTS, any steels and agouti), Chocolate Agouti (GTS, any steels and agouti), Lilac Agouti (GTS, any steels and agouti),	Any Steel (GTS, any steels and agouti)	Steels should not be bred to any rabbits with the self gene because self will hide the steel gene. This means no breeding to any selfs, shadeds, etc. Two steel genes will also hide the steel, so watch for false "selfs" coming from your steel to steel breedings.	
Blue Gold Tipped Steel (BGTS)	Chestnut (GTS, Chestnut, steels and agoutis), Opal (BGTS, opal and agouti), Chocolate Agouti (GTS, any steels and agouti), Lilac Agouti (BGTS, any dilute steels and dilute agoutis)	Any Steel (GTS, steels and agouti)	Steels should not be bred to any rabbits with the self gene because self will hide the steel gene. This means no breeding to any selfs, shadeds, etc. Two steel genes will also hide the	

			steel, so watch for false “selfs” coming from your steel to steel breedings.	
Chocolate Gold Tipped Steel (CGTS)	Chestnut (GTS, Chestnut, steels and agoutis), Opal (GTS, any steels and agouti), Chocolate Agouti (CGTS, any steels and agouti), Lilac Agouti (CGTS, any chocolate steels and chocolate agouti)	Any Steel (GTS, steels and agouti)	Steels should not be bred to any rabbits with the self gene because self will hide the steel gene. This means no breeding to any selfs, shadeds, etc. Two steel genes will also hide the steel, so watch for false “selfs” coming from your steel to steel breedings.	
Lilac Gold Tipped Steel (LGTS)	Chestnut, Opal, Chocolate Agouti, Lilac Agouti,	Any Steel (GTS, steels and agouti)	Steels should not be bred to any rabbits with the self gene because self will hide the steel gene. This means no breeding to any selfs, shadeds, etc. Two steel genes will also hide the steel, so watch for false “selfs” coming from your steel to steel breedings.	
Silver Tipped Steel (STS)	Chestnut (GTS, Chestnut, steels and agoutis), Opal (GTS, any steels and agouti), Chocolate Agouti (GTS, any steels and agouti), Lilac Agouti (GTS, any steels and agouti),	Any Steel (GTS, any steels and agouti)	Steels should not be bred to any rabbits with the self gene because self will hide the steel gene. This means no breeding to any selfs, shadeds, etc. Two steel genes will also hide the steel, so watch for false “selfs” coming from your steel to steel breedings.	**Silver tips are caused by the dark chin gene. To get silver tips, the gold tips must carry it or it must be introduced. It is best to use chins and/or squirrels if you do not have access to silver tips, which will introduce it without messing up the color. Breeding a

				silver tipped to a silver tipped will never yield a gold tipped.**
Blue Silver Tipped Steel (BSTS)	Chestnut (GTS, Chestnut, steels and agoutis), Opal (BGTS, opal and agouti), Chocolate Agouti (GTS, any steels and agouti), Lilac Agouti (BGTS, any dilute steels and dilute agoutis)	Any Steel (GTS, any steels and agouti)	Steels should not be bred to any rabbits with the self gene because self will hide the steel gene. This means no breeding to any selfs, shadeds, etc. Two steel genes will also hide the steel, so watch for false “selfs” coming from your steel to steel breedings.	
Chocolate Silver Tipped Steel (CSTS)	Chestnut (GTS, Chestnut, steels and agoutis), Opal (GTS, any steels and agouti), Chocolate Agouti (CGTS, any steels and agouti), Lilac Agouti (CGTS, any chocolate steels and chocolate agouti)	Any Steel (GTS, any steels and agouti)	Steels should not be bred to any rabbits with the self gene because self will hide the steel gene. This means no breeding to any selfs, shadeds, etc. Two steel genes will also hide the steel, so watch for false “selfs” coming from your steel to steel breedings.	
Lilac Silver Tipped Steel (LSTS)	Chestnut, Opal, Chocolate Agouti, Lilac Agouti	Any Steel (GTS, any steels and agouti)	Steels should not be bred to any rabbits with the self gene because self will hide the steel gene. This means no breeding to any selfs, shadeds, etc. Two steel genes will also hide the steel, so watch for false “selfs” coming from your steel to steel breedings.	
Red **most rufus modifiers and color intensifiers** **May be true wide-band genetically**	Red (Red), orange (red and orange), tri’s (nice colored tri’s, red, orange), Chestnuts		Reds have a ton of modifiers and color intensifiers, making the color the deep rich red. They can be used with oranges and tri’s to deepen the color, I	Reds are very cool and extremely rare. The gene that makes reds will turn otters into tans.

brown eyes			wouldn't recommend attempting to deepen the fawn color you'll probably end up just making a ton of oranges and losing the rich red color.	
Orange **good amount of rufus modifiers and color intensifiers** **brown eyes**	Red (red, orange), orange (orange), tri (tri and orange), Agoutis, Frosty (orange, frosty), tort (orange, tort),	Torts	Torts won't "ruin" the color, but if the point is to try for some color, don't bother with them.	
Fawn **only a few rufus modifiers and color intensifiers** **brown eyes**	Orange (orange, fawn), fawn (fawn), tri (tri, orange/fawn), Agoutis, frosty (fawn/orange, frosty)	Torts	Torts won't "ruin" the color, but if the point is to try for some color, don't bother with them.	
Cream **This is the dilute!** **blue-gray eyes**	Orange (orange, fawn, cream), fawn (fawn, orange, cream), cream (cream), Agoutis, Frosty (orange, frosty, cream) Tri (tri, orange, fawn, cream), blue tri (blue tri, cream), chocolate tri (tri, fawn, orange), lilac tri (blue tri, cream)	Torts	Torts won't "ruin" the color, but if the point is to try for some color, don't bother with them.	
Frosty	Orange (orange, fawn, cream, frosty), fawn (fawn, orange, cream, frosty), cream (cream), Frosty (frosty), Chinchilla (chinchilla, frosty), Squirrel (chinchilla, frosty, squirrel)			
Otter (Black Otter)	Black otter (black otter, black, blue, blue otter), blue otter (black otter, blue otter, black, blue), chocolate otter (black otter, chocolate otter, black, chocolate), lilac otter (black otter, blue/choco/lilac otter, black, blue, chocolate, lilac), black (black		** Martens follow the same rules as the otters in that any otter or self (or other Martens) are fine to breed them with. Right now they are not showable in HL, but they are being worked on and hopefully will pass in a few years.**	Do not breed otters with torts, orange, fawn, or creams because they have a gene that will cause tort otters.

	otter, black, blue otter, blue), blue (black otter, blue otter, blue, black), chocolate (black otter, chocolate, black, chocolate otter), lilac (black otter, blue/choco/lilac otter, black, blue, chocolate, lilac)			
Blue Otter	Black otter (black otter, black, blue, blue otter), blue otter (blue otter, blue), chocolate otter (black otter, chocolate otter, black, chocolate), lilac otter (blue otter, lilac otter, blue, lilac), black (black otter, black, blue otter, blue), blue (blue otter, blue), chocolate (black otter, chocolate, black, blue, blue otter, lilac otter, chocolate otter), lilac (blue otter, lilac otter, blue, lilac)			Do not breed otters with torts, orange, fawn, or creams because they have a gene that will cause tort otters.
Chocolate Otter	Black otter (black otter, black, blue, blue otter), blue otter (black otter, blue otter, chocolate otter, lilac otter, lilac, chocolate, black, blue), chocolate otter (chocolate otter, chocolate, lilac, lilac otter), lilac otter (chocolate otter, lilac otter, chocolate, lilac), black (black otter, black, blue otter, blue), blue (black otter, blue otter, blue, black), chocolate (chocolate otter, chocolate), lilac (chocolate otter, lilac otter, chocolate, lilac)			Do not breed otters with torts, orange, fawn, or creams because they have a gene that will cause tort otters.
Lilac Otter	Black otter, blue otter, chocolate otter, lilac otter, black, blue, chocolate, lilac			Do not breed otters with torts, orange, fawn, or creams because they have a gene that will cause tort otters.