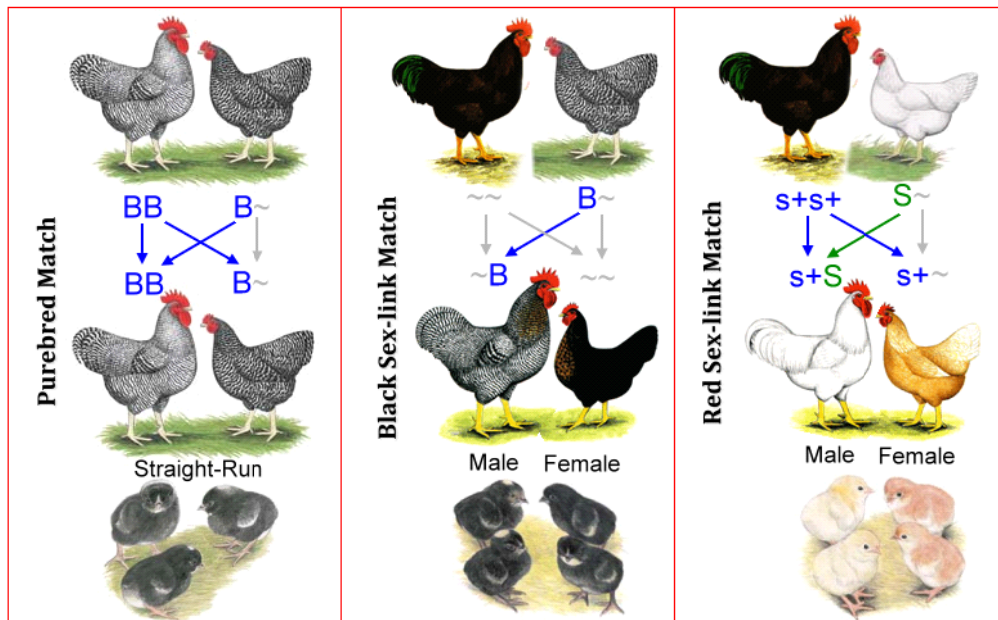


Sex-Link Hybrids

Sex-links are the result of first generation crossing of two different **pure** breeds where the genetic mix enable chicks to be sexed at hatch. Hybrid vigor makes them better and more efficient producers of eggs, meat, or both.

- AUTOSEXING BREEDS:** Autosexing breeds are similar to sex-links in that male and female chicks can be separated at hatch; however, autosexing breeds are pure breeds that breed true – the succeeding generations of offspring resemble their parents, grand-parents, and great-grand-parents. For the backyard, autosexing breeds may be a good choice because they do not require the hobbyist to maintain two different flocks required for breeding sex-links. Unfortunately, autosexing breeds do not enjoy widespread popularity probably because they lack the benefits of hybrid vigor. Autosexing breeds include:
 - Amrock
 - Ancobar
 - Barnebar
 - Bielefelder
 - Brockbar
 - Brussbar
 - Buffbar
 - Cambar
 - Cobar
 - Cream/Gold Legbar
 - Dorbar
 - Hambar
 - Niederrheiner
 - Norske Jaerhon
 - Oklabar
 - Polbar
 - Rhodebar
 - Welbar
 - Whealbar
 - Wybar
- Z and W CHROMOSOMES:** Unlike humans, gender in poultry is determined by the female – females carry one “Z” chromosome and one “W” chromosome while males carry two “Z” chromosome. In addition to gender, Z chromosomes also carry several other alleles (markers) such as color and feathering traits. Mixing and matching dominant and recessive traits on the Z chromosome allows the breeder to produce male chicks that look different than female chicks at hatch.

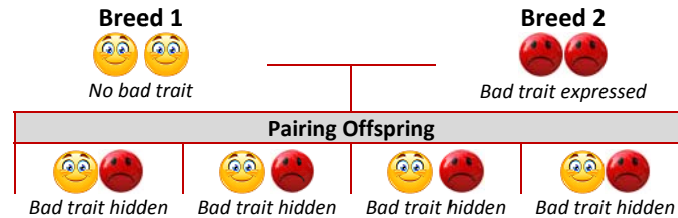


Popular Sex-Link Hybrids				
Common Name ^a	Rooster	Hen	Female Chicks	Male Chicks
Black Star	Rhode Island Red	Dominique	all black	yellow headspot
	Rhode Island Red	Barred Rock	all black	yellow headspot
Marans Star	Black Copper Marans	Cuckoo Marans	all black	Yellow headspot
Gold Star	Rhode Island Red	Rhode Island White	buff	white
Gold Comet	New Hampshire	White Rock	buff	white
Cinnamon Queen	New Hampshire	Silver Laced Wyandotte	buff	white
Red Star	Production Red	Delaware	buff	white
Brown Star	Rhode Island Red	White Rock	buff	white

^a Common names and breeding combinations differ from breeder-to-breeder.

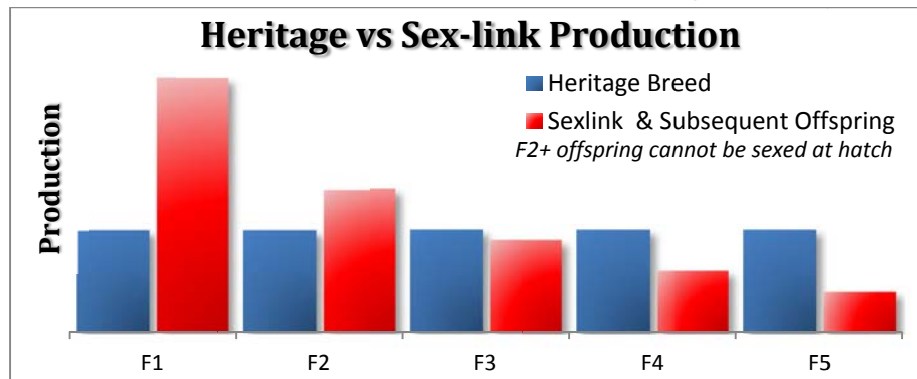
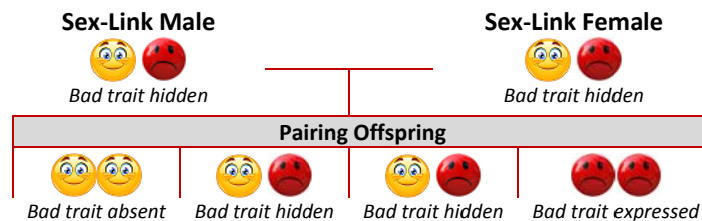
For a more detailed description on the various breeds that can be used in creating sex-links, visit "Sex- linked Information," in the Backyard Chicken Forum: <https://www.backyardchickens.com/threads/sex-linked-information.261208/>

- **HYBRID VIGOR:** A hybrid is the offspring of two plants or animals of different species, varieties, or breeds. The hybrid vigor phenomenon has been used in both plants and animals to increase fertility, hatchability, offspring vigor, and both quantity and quality of production (meat or eggs). Technically, breeding two genetically dissimilar parents greatly increases the odds that an undesirable, recessive (hidden) allele will be paired with a more desirable, dominant allele causing the undesirable trait to be masked (concealed). Since this can occur across multiple systems, the production results can be significant.



The sex-link focus is frequently on the ability to sex chicks at hatch; this is a mistake. The masking (concealing) of undesirable traits occurs not only on the sex chromosomes but on all 36 pairs of chromosomes and affects multiple systems resulting in the benefits of hybrid vigor.

Sex-link chickens are not a true breed and do not breed true – their offspring do not retain the same traits as their parents. Second generation (F2) chicks cannot be sexed at hatch and undesirable, recessive (hidden) traits begin to emerge. Since the mixing occurs across all 36 chromosomes, subsequent generations (F3+) are likely to demonstrate further decline because the diversity of physical traits makes selective breeding difficult.



- **CHOOSING BREEDS FOR CREATING SEX-LINKS:** While there are several combinations that can be used to create sexable hatchlings, not all combinations are valuable productively. Simply creating sex-links because you can serve no real purpose. Instead, determine the production qualities desired and then select two breeds that already display those qualities and that crossing will create a sexable chick. Thus far, I have bred three types:
 1. **BLACK STARS:** Rhode Island Red rooster + Dominique hens produces beautiful black, rose comb hens that are superb layers of large, cream colored eggs. Since they are smaller hen, a higher percentage of feed goes into egg rather than meat production. They lay through the winter, free range well, and are predator aware – they are hard to catch and because they resemble crows the hawks leave them alone.
 2. **MARANS STARS:** Black Copper Marans rooster + Cuckoo Marans hens produce beautiful black, single comb hens that lay a large, darker brown egg. They are only fair layers and go broody frequently.
 3. **GOLD STARS:** Rhode Island Red rooster + Rhode Island White hens produces beautiful gold, single comb hens that are superb layers of extra-large, brown eggs averaging nearly 95% lay their first season. However, such high production takes a significant physical toll with production dropping significantly after their first season. Additionally, the gold coloring attracts hawks and overhead cover is recommended.