

## MID~JULY, 2013 ANTICIPATED AVAILABILITY

Honey (no aka)

Most Commonly Used Name: Honey

Mode of Genetic Inheritance: Recessive

Morph Type: Single Recessive Mutations of Sunkissed and Caramel

Eye Color: Black pupil & *body ground colored* iris

Most Honey corns are aptly named for their namesake with overall coloration resembling bee honey. Combining Sunkissed (the second hypomelanistic mutation to be discovered) with Caramel, Honey corns have soft and beautiful colors. Review SUNKISSED corns for more information about the distinguishing mutation that makes Honey Corns so appealing. Some features the Honey inherits from the Sunkissed mutant side of its family tree include:

1. Generally grouchy demeanor toward humans.
2. Head pattern that is odd and atypical for being a corn snake.
3. Often elongated markings that are sometimes spaced farther apart than most corns.
4. Atypical belly pattern; usually less than most corns and spaced sometimes oddly and not in the classic checkerboard pattern of most corns. Breeding Sunkissed (and therefore Honey) mutants to other corn snake mutations and morphs often promotes aberrant pattern from the SK or HO mutants of such pairings. Many SK and HO Motleys have considerably more belly markings, which is atypical since classic Motley mutants seldom have a single belly marking.

Enough of the odd characteristics of these beautiful mutants. If there is one negative stigma attached to this mutation, it's surely the potential that the one you get may have a genetic defect sometimes called "star-gazer's disorder". This is called a lethal mutation since effects of the mutation are not advantageous to the homozygote. Star-gazer's causes the snake to have limited or aberrant control over balance. Similar neural disorders have been demonstrated in many animal species, and sometimes the cause is viral. Also, the *neural* symptoms of this mutation parallel that of animals with certain parasites that retard balance control. Star-gazer's in corn snakes is not a contagious disease or pathogen, so the only way

your snake's will get it is through genetics. It is inherited recessively, so some people that swear it is not lurking in the genes of their snakes, cannot really be certain of that - without controlled breeding trials. Only by breeding a suspect corn to a star-gazer homozygote or heterozygote can one determine the presence of the gene. Ideally, if you have any corns that MAY have this genetic mutation, you should breed it to a known homozygote. Even that is not proof positive, given that you must have at least 20 progeny (of which 100% are not afflicted with the disorder) in order to be reasonably assured that it's not in your snake's genome. This SG mutation was discovered in Sunkissed mutants, but it is not linked to the Sunkissed mutation. It has been reported in several other non-Sunkissed corns (mutant or not). Hence, if you discover you have a star-gazer mutant, it is recommended that you restrict it's genes to creating "control" snakes that can be used by others to determine the presence or absence of the lethal gene in their snakes. Even though it is not transmitted like a viral pathogen, the danger of the gene inflicting many other breeding lines of snakes is likely and potentially disastrous, in the absence of breeding trials. Such trials are under way here at SMR (and with many breeders) and if/when we determine that any of our snakes are carriers of this lethal gene, they will be euthanized. BTW, if you think you're safe because you have been breeding sunkissed corns (or any other corn snake type) for over four generations without seeing any homozygotes of the disorder, think again. If your first Sunkissed corn (or Okeetee or other type) was het for this mutation, it could take many generations for you to make the discovery. Since each snake hands one copy of its' genotype to each of its' progeny, potentially half of each generation could be heterozygotes. If you (or your customers) continually bred those heterozygotes to non genetic carriers of the mutation, only part of their progeny would inherit one copy of the mutation. If you were lucky in not seeing any sign of the gene in over four generations (or potentially unlucky, in this case), it does not follow that none of your snakes are carrying a copy of the gene. Until you pair two of them with a copy of the gene, it will continue to hide in the family tree. Several years ago, I bought three female Okeetees from a breeder that is now out of the corn snake trade/hobby. They were sold as being het for Sunkissed. I bred one of the females to one of my best Extreme Okeetees and sold the babies as Okeetees. Two years later, a customer called me to ask why some of the Okeetee babies she produced from the pair of Okeetees she got from me were doing the loopy, corkscrew locomotive thing. Because I had never produced a star-gazer homozygote, I naively ruled that out, but upon

reviewing acquisition records, I identified that the parents of her mutants were the Okeetees het for Sunkissed. I immediately tracked down the other two customers who had purchased some of those, advising them that those snakes could be carriers of the lethal gene. I then euthanized the three adult female Okeetees I purchased from the other breeder. This lethal gene could be in hundreds or thousands of corns right now, and they don't have to be Sunkissed corns. Hence, if you ever discover that you have the gene, advise all customers that purchased its progeny, and if you're not going to use the carriers for producing TEST snakes for others, I recommend that you humanely euthanize them. By essentially eliminating them from the gene pool, you have taken an important step toward eliminating this horrible gene.

Mixing the Sunkissed mutation with other color mutations and with pattern mutants is never disappointing. Except for the grouchy demeanor, I don't recall seeing a single Sunkissed or Honey mutation compound I didn't like. I know you'll have fun mixing and matching them with other corn snake mutations and morphs.

What to expect:

As neonates, they are fairly colorful and most of them keep and intensify that honey coloration. Some of mine actually appear to be greenish-gold in overall coloration. Some of the blotch marginal pattern only covers half of one scale each, rendering the vision of faint or pixelated pattern outlines. The head pattern on most is difficult to explain, so we'll just say it's "un-cornly" - but tasteful. Most breeders hesitate to mention the scratch on the side of the new car you're buying, but the only thing most Sunkissed and Honey mutants have in common (other than their beauty and genetic potential when bred to other mutants) is their low regard for human beings. We have a couple here that are predictable and "human friendly", but fewer of the Honeys are that way - compared to their Sunkissed mutant counterparts. I see that trait somewhat diluted when we outcross them to other mutants, but it would be wrong not to warn you that most Sunkissed-type corns are not the pets you'd freely hand to the children.

### Important Note:

These images are not renderings of the actual animals being offered, (except for uniquely offered snakes found in the SURPLUS section of this web site). We do not provide pictures of individual hatchling snakes for sale, nor do we recommend that you ever choose a new pet based on an image of its neonatal form. Corns change so dramatically from hatchling to adult, they will NEVER have the same colors or contrasts throughout maturity. While most of the snakes we produce will mature to resemble the featured adult image(s) on our web site, unlike manufactured products that are respectively clones of each other, the nature of polygenic variation results in each animal being similar but not identical to others of its morph. The snake we select for you may not mature to be identical to the pictured examples, but will be chosen based on our experience of observing which neonates will mature to properly represent their respective morph. We take this responsibility very seriously, and therefore publish the guarantee that we will exchange your SMR snake if it does not mature to be like our advertised examples.