A kitten excellent marked Silver Black Dalmatian owned and bred by Karen Robbins. Photo ©2000 Craig Robbins



# Seeing Spots:



### **History**

To the best of our knowledge, Dalmatian rats are a uniquely American breed. The first Dalmatian recorded was born on November 12, 1986. Named "Badger," he was out of a female Variegated Jackie Jennings gave to Joy Ely which was then mated to one of Joy's male Variegateds. Since Jackie didn't want anything out of the litter, Geri Hauser took Badger and his two sisters before the litter was given back to Jackie. Originally thought to be a spotted Blue, it was confirmed later that he was in truth a Silver Black and the marking was called "American Variegated."

Badger sired a number of litters and went on to produce generations of Dalmatian rats. The first breeding and first litter of Dalmatian babies was with his Black Berkshire-Variegated sister "Jackie." A litter of 9 was born on April 5, 1987, in which were found a Black "American Variegated" male, two Black "American Variegated" females, and one each Champagne "American Variegated" male and female, with the others being a Black Irish male and female and two Black Berkshire-Variegated males. The Black "American Variegated" male and females and the Champagne "American Variegated" female were kept. On April 7, 1987, his Black Variegated (medium markings) sister "Joy" produced a litter of 15 Blacks and Champagnes which included two Black Variegated females whose markings were light, more like spots that were kept. In another breeding, Badger was bred to a Black slash-Blaze Berkshire-Variegated female, and a male Silver Black poor Berkshire with Blaze was kept from this litter. Bred with his Black Berkshire-with-star daughter, a Black Variegated and Silver Lilac poor Irish males were kept. These Dalmatian offspring were then interbred and from them came the basis of all the Dalmatians we have today.

# Standardizing

These original spotted rats were called "American Variegated" since they were out of Variegated but originated here in the U.S.A. and the markings were more spotted like a nicely marked Variegated mouse.

On May 30, 1987, Dalmatians made their first appearance on the show bench with Geri Hauser showing 1 adult and 7 kittens-4 Black, 3 Champagne, 1 Lilac. Badger was the adult shown and was Best "American Variegated" that day. His comments were "Wins on markings, head could be broken more, Fair color, FG head [the rest was good]" (we didn't know at the time about the Dalmatian gene silvering and lightening the color). Their final showing in the Unstandardized class was March 18, 1989, and the Dalmatian marking was officially standardized as "American Variegated" on April 15, 1989. The name was changed to Dalmatian on October 13, 1991, since that was more descriptive of what they looked like.



A Silver Black in a Blaze Berkshire marking owned and bred by Geri Hauser that won the Best Unstandardized class (for the Silver Black color) July 9, 1988, at the show at the Orange County Fair. Photo ©1988 Larry Ferris.

# By Nichole Royer & Karen Robbins

### **Silver Black**

The Silver Black color that we were seeing in the Dalmatian rats and their offspring was recognized as being something different and started its own standardization process July 9, 1988, and was then standardized April 12, 1992. While it is most common in the Dalmatian marking, there have been English Irish/Irish (EI/I; large marking), Berkshire, Variegated-type, and Capped in the Silver Black color. At one point we tried getting the Silver Black in a Self, but the closest we came at the time was a Berkshire. Since the Silver Black is the "Dalmatian" gene, breeding one of the non-Dalmatian markings to a Variegated or another Dalmatian with more correct markings will get you back to the more familiar Dalmatian marked rat.

### **Show Winners**

There have been two Dalmatians winning Best In Show. The first was at the January 11, 1992, Annual Show, with "GH Confetti," a Lilac Dalmatian owned by Kimberly Johnson and bred by Geri Hauser. She also took home that day the awards of Best Standard Rat, Best Marked Standard, and Best Marked In Show.



A first Dalmatian to win Best In Show. "GH Confetti" a Lilac Dalmatian owned by Kimberly Johnson, bred by Geri Hauser, at the January 11, 1992, Annual show. Photo ©1992 Larry Ferris.

The next Dalmatian BIS winner was at the July 9, 1994, show, "SG Phlora," a Silver Black, owned by Jazmyn Concolor, bred by Simona Gortlerova.

Dalmatians have also won Best Marked several times along with Most Unusual Markings in the Pet classes.

## Description

Like all marked rats, Dalmatians can vary greatly in appearance. The AFRMA standard says: "Dalmatian rats may be shown in any recognized color. Markings will be similar to the Variegated mice with color splashes/spots on a white background, and free from any solid clear-cut markings. The splashes should be numerous and ragged in outline, but approximately equal in size, and well distributed over the entire body. Faults - Splashes running together so as to suggest roaning; splashes too large; solid areas; too few splashes."

Ideally what you want to see is a rat that looks like it has been splattered all over with random splotches of color. The pattern does vary, as do all marked varieties, and you can end up with anything from a rat with just a few spots, to rats with so many spots that they run together.



A Silver Black Dalmatian (heavy marked) owned by Donna Kingsley that was Runner-up Best Unstandardized at the January 21, 1989, Annual show. Photo ©1989 Larry Ferris.

One unique characteristic of the Dalmatian gene is its effect upon the color of the rat. Unlike all the other markings, the color on Dalmatian rats is always silvered. The silvering is always very distinct with half the hairs being colored and half being white.

The most common color in Dalmatian is the Silver Black as that is the most associated with this marking, but they have also been seen in Champagne, Lilac, Silver Lilac, Blue, Russian Blue, and Silver Dove/ Russian Dove.

### Genetics

With several years of focused test breeding, we now know that Dalmatian is a dominant trait. They also appear to be



A Silver Lilac Dalmatian Rex, "LAN Tazz," that won Best Marked Rex and Best Rex at the July 22, 1995, show at the Orange County Fair. Rat owned and bred by Jazmyn Concolor. Photo ©1995 Craig Robbins.

homozygous lethal based on the fact of the presence of anasarca babies that have happened only in Dal. x Dal. litters (6 litters). The litters of Dalmatian x Dalmatian are also generally smaller in numbers. We also know it works with Variegated to produce the more recognized Dalmatian markings, but the gene can be put on other markings such as English Irish, Berkshire, and Capped. So in essence you have a



A Silver Black El/I (Ig El marking) male showing how silvered he is which is the trait of the Dalmatian gene. When he was bred with Variegated, correct Dalmatian markings were produced. Photo ©2005 Karen Robbins.

"Dalmatian" that has the characteristic silvered color but in another marking. When one of these "Dalmatians" are bred with Variegated, you will get your recognized Dalmatian marked rat. Modifiers will also affect how many and where the spots are located.

The cause is a unique gene which acts in combination with Berkshire and Variegated markings to produce very obvious results. This gene "extends" the amount of white in the coat, i.e. creates silvering, and increases the white markings. It turns Variegated rats into Dalmatians. It also turns some Berkshires into very silvered Berkshires with white running up onto their sides, up around their necks, and blazes on their faces. On all these rats the solid colored spots become heavily silvered and diluted.

Since this is just a color/marking gene, you can get Dalmatians in other coat types. One popular coat type Dalmatian breeders have put with the Dalmatian is the Rex, though with the Rex coat being stand-up/ curly, it can change the look of the spotting.



A Silver Black Dalmatian Rex, "GH Fat Albert" owned by Jackie Jennings, bred by Geri Hauser, that won Best Marked Rex and Best Rex at the March 14, 1994, show. Photo ©1993 Craig Robbins.

### **Breeding**

When two Dalmatian rats are bred together, you usually get up to 4 distinctly different kinds of babies. Some of the babies in every litter are normal colored, really nicely marked Berkshires with a well placed head spot (hs). Some are nice Variegateds, again with normal color and a head spot. Other babies can be Berkshires with very silvered color and white that runs up high on their sides. These almost



A pregnant Silver Black Dalmatian, owned and bred by Karen Robbins. She had a litter of 9 (6 Dalmatian, 3 hs Berkshire) the day after this photo was taken; father to the litter was a Silver Black Dalmatian. Photo ©2007 Karen Robbins.

always have blazes, stars, or lightning streaks. The fourth kind of baby is of course the desired Dalmatian. These have the silvered color and can be anything from a mass of ill defined splotches all melding together, to a white rat with one or two colored patches, to the ideal of evenly spaced distinct spots all over the body. There can also be Capped and mis-marked Capped in some litters.



A Silver Black Blaze (has a half white face) "heavy Dalmatian" owned and bred by Karen Hauser that won the Best Unstandardized class (for the Silver Black color) at the May 19, 1991, show. Photo ©1991 Larry Ferris.

In breeding Dalmatian rats, you ideally want to use two nicely marked Dalmatians. This gives you the best percentage of nicely marked offspring. Both Variagated and Berkshire (that are out of Variegated or Dalmatian; have head spots) can be used as well in a Dalmatian breeding program, and will produce Dalmatians (the kitten at the beginning of the article was out of a Berkshire mom [who was out of two Dalmatians] and a Dalmatian dad). Breeding to Hooded is not recommended as some of the resulting babies are very poorly marked Variegateds that look like "Barebacks" with little, if any, color on their backs that is concentrated down the spine area and with blazes or stars (same thing happens when breeding Variegated



The females in a litter of Silver Black Dalmatians and Variegated owned and bred by Karen Robbins. Parents were a Black Berkshire and Silver Black Dalmatian. Photo ©1997 Craig Robbins.

to Hooded). Dalmatian is not a marking which can be produced by simply breeding together other markings . . . the gene that produces it must exist on at least one of the parents.

If you breed a Dalmatian that is too heavy in markings with another too heavily marked, this will move you more towards the correct Dalmatian markings but they still won't be the ideal white rat with spots. That's where breeding to a Var-



Two Silver Dove/Russian Dove little heavy marked Dalmatians at 12 days old, owned and bred by Karen Robbins. They were out of two very heavily marked Silver Black Dalmatians. Photo ©2008 Karen Robbins.

iegated or correctly marked Dalmatian needs to come in to your breeding program.

Breeding a Dalmatian to a Self rat will produce markings in between the two, i.e. mostly solid colored rats with white on the chest/belly in various amounts. Any that are Silver Black in color are your "Dalmatian" gene rats and must be kept to make more Dalmatians.

Some breeding examples of breeding

Dalmatian with other markings done by Karen Robbins (to 2007; more since then):

- Dal. x Berk. = Dal., Berk., or Dal., Berk., Var. (half the litters) (16 litters total; 2 litters had EI/I which are lightly marked Berk.)
- Dal. x Var. = Dal., hs Berk., Var. (12 litters total; 2 litters also had Capped)
- Dal. x Collared = hs Berk., Var., then some Dal., Collared, and one litter also had EI (3 litters total)
- Dal. x Dal. = Dal., hs Berk., or Dal., Var., or Dal., hs Berk., Var. (6 litters total)
- Dal. x Capped = Var., Capped, hs Berk., Dal. (1 litter)
- Dal. x Irish = Dal., Self (1 litter of 3)
- Dal. x Hooded = Berk., Collared (which are "Dalmatian" rats)(1 litter)
- Dal. x Essex = Self/EI (w/sm. spot chest), EI/I, Irish, Berk. (no hs) (1 litter of 6)



A very nicely marked Silver Black Dalmatian Satin with nice spotting, "BMR Moonshine Maddness," owned and bred by Carissa Cosley, winning Best Satin Rat at the January 17, 1998, Annual Show. "Moonshine" was beaten out for Best Marked In Show by "One In A Million" (a.k.a. Max), a Lilac Hooded Standard. Photo ©1998 Nichole Royer.

While those beautiful spots are clearly the hallmark of the Dalmatian rat, it is equally important to pay close attention to how the rat is built. No matter how perfect the markings are, a small, scrawny, disproportionate rat is never going to be attractive. Temperament is equally important. Breeding for spots alone is an easy trap to fall into, and should be avoided at all costs.

A conversation with a fancier in another part of the United States brought to light an interesting problem. Apparently in other parts of the country, Dalmatian lines regularly produce babies with megacolon.



A Silver Black Dalmatian that won Best Marked In Show at the January 26, 2008, Annual show. Rat owned and bred by Karen Robbins. Photo ©2008 Craig Robbins.

This seems to be accepted as unavoidable, and it is widely thought that the two are simply linked. This came as quite a surprise to California fanciers since the Dalmatian lines worked with here do not now, and never have, produced megacolon. Litters from many generations of Dalmatian breedings have proved unexceptional, normal sized, and free from any birth defects or other problems (other than the six litters of Dal. x Dal. that had anarsarca in them). Megacolon does not simply "come with the territory" and anyone with Dalmatian lines that produce it should discontinue their line.

### Showing

Showing Dalmatian rats is very similar to showing any other marked variety. Judges will be looking for how closely the pattern on the rat matches the standard, with the most common faults being patches of solid color and large areas devoid of spots. It is not unusual for Dalmatian rats to have too much solid color on their heads and for their spots to merge down their backs. Also frequently sseen are Dalmatians with spots only on the top of their bodies and not on the sides. Ideally, show quality Dalmatians do not have these faults.



A Silver Black Dalmatian, "LAN Ink Spots," being judged at the January 28, 1995, Annual Show, that won Best Marked. However, the spots are just on the head and rump and missing in the middle. Rat owned and bred by Jazmyn Concolor. Photo ©1995 Craig Robbins.

It is unfortunate, but there have been a number of Dalmatian rats shown who have beautiful spots, but horrendous type. I will once again stress the importance of breeding for more than just nice spots. Those spots are very impressive, but a rat who has poor type is never going to do well at a show irregardless of how "spotty" he may be.

Due to the large amount of white on their bodies, it is very important that a Dalmatian rat be shown in immaculately clean condition. Many will need a bath a week prior to the show, making sure you get off any staining and scrub dirty tails, and spe-



A Silver Black lightly marked Dalmatian with no color on the face, owned and bred by Karen Robbins. She shows staining on her neck and a dirty tail that would need to be addressed (bathing) prior to showing. Photo ©2007 Craig Robbins.

cial attention should be paid at all times to keeping their cage spotlessly clean. Staining is very obvious and can greatly detract from an otherwise excellent exhibit. Chalking the day before a show (using a little water and cornstarch), will help with any last minute smudges that were added in the time after their bath. Just be sure to gently brush all the cornstarch out of the rat's coat well before it is judged.  $\bowtie$ 



. . . and all grown up—an excellent marked Silver Black Dalmatian owned and bred by Karen Robbins. His mom was a Black Berkshire and dad was a Silver Black Dalmatian. Photo ©2000 Craig Robbins.