

From October 1980 MRBA newsletter *Mouse and Rat Tales*

*Bonnie talks about the origins of mouse colors in the fancy in the early days including dominant and recessive gold [Fawn], Spotted, Blue, Chocolate-Blue [Dove], Beige, Variegated, Siamese, Satin, Long Hair, Frizzie, Hairless, Waltzer, and Tufted. There is also a paragraph on her early rats.*

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## PROFILE - Bonnie Walters

My first mouse was acquired to feed my snakes. In fact, I remember the very first mouse very well. It was 1965. I had an adorable little five-inch long milk snake, black, red, and yellow and smooth as silk. The first mouse was an albino female, very pregnant, whose babies were intended to feed the tiny milk snake. Well, the mouse is one of the few I've had that died in birth, but she had one baby before doing so. The tiny mouse I gave to the tiny snake, who dived right in. It was so big compared to him and he was taking so long to eat, I left. When I got back, the mouse was a huge lump in the little snake's neck, and he was dead, apparently strangled. So much for my first mouse.

Fortunately, things did go better. At first, I didn't really own mice after the milk snake incident. A friend of mine in college was doing an independent study on cancer strains of mice and I helped him with them. I got enough mice from that to feed my snakes. Most of the mice were black, chocolate, and albino. As George finished up his work, I took over his colony and really ran it for the college biology department. One of the professors used the *Coat Colors of Mice* to illustrate simple inheritance, so having the examples of mice to show classes was handy. I was enjoying the mice anyhow, but then in one litter some lilacs and a little runty champagne turned up. I was so fascinated by the much more attractive (to my eyes then, at least) lighter colors, that I got hooked. When I left college at the end of the summer of 1966, heading for graduate school, I left instructions for running the colony and took a couple of trios of mice with me. I also took 1 adult and 3 baby blue racers and a number of tropical fish.

Much to my surprise, I had quite a bit of difficulty finding a place for my animals at graduate school, this in spite of being in the zoology department. My advisor found a corner for my snakes, and the fish could go into my dormitory room, but the mice were illegal everywhere. I smuggled them into my graduate office, and because rules weren't checked too closely, got by with it long enough to get moved from the dorm into a house where the mice could get a corner. The most exciting acquisition in my period at Indiana University was without a doubt gold mice. A fellow student, who got mice for his snakes from the mouse room there, told me about these beautiful mice and said he'd try to get me one. I will never forget being in the library working away, when he came in with a small sack that he gave me. Inside were beautiful ebony eyes set against the most magnificent gold fur imaginable. Getting that first gold mouse was even more exciting than getting satin, for one thing, satin wouldn't be as big a deal without gold mice (my prejudices are showing, aren't they?). With what I know now about dominant gold mice, it is a wonder I got anything at all out of that female. But I did, and gold, orange mice are still my favorites.

Another nice find came in the summer of 1968 when we were in Columbus, Ohio, for scientific meetings: I found my first spotted mouse. And he wasn't worth much by our marked standards, just a spot on his forehead. The truth is that I don't even remember his color; that white spot was his claim to fame. To get more I had to very slowly select for mice with more white. It took several generations, but I ended up with really nice even marked mice, entire litters of them. Foolishly, I outcrossed in later years to mice with a nose spot that I thought was cute. I didn't keep the two strains separate, and lost the even spotting of the old line. I even tried to get it back by selecting again from the forehead spot, but it didn't work.

I've done a lot of fooling around with spotted mice. I tried to select off all the color, but never quite got rid of all the white on the rump. And I once had a line of spotted "mini" mice. They were half the 3/4 size, quite cute and healthy. But as selection for small size proceeded, their fertility plummeted. The last of these lived out happy, "childless" lives. I made considerable effort to spot dominant gold mice at this time too; I found out all by myself what the books tell you: that gold mice don't spot well. Anyhow, spotted mice are still among my favorite colors.

Nothing new came out of our 6 months in New York, except my first sales. But when I got here to San Luis Obispo, I kept my eyes open any time I got to a pet shop, and slowly I picked up quite a bit in the early 1970s. First was blue: I found a blue and a chocolate-blue [Dove] in a batch of feeder mice which I have no idea where they came from. Same with the first beige, which was a pale, washed-out creature, but those brilliant black eyes characteristic of this color was on this first mouse and caught my eye. I also got a black-eyed white female at the same time. It took a

lot to bring the beiges to the color we have now; the original was not only agouti, but carrying blue as well; both of these ruin beige color. Much later, in December 1976, came the first variegated, or dominant spotted, again from a batch of feeders in Goleta, and only a single female. I knew there should be variegateds in her first litter (I'd been looking for this gene), and there was, a single male. She never produced another litter, but that male was enough to get the strain going, and as all know, it now has quite a following.

In the early 1970s I also got to raising long-haired hamsters. I occasionally took hamsters and mice and headed south on Highway 101 selling them. In this way, I met Jim Touchette at a pet shop in Oxnard. We talked hamsters and mice probably more than was good for his job. Through Jim, I made contact with Barb Melton. It was strange to meet another person who was as nuts about mice as I! We exchanged mice, of course, and I got my other favorite color: Siamese. Even yet, people who have not seen Siamese before, exclaim over them.

It was through a serendipity involving both Barb and Jim that I got something that I'd been looking for and wanting for years: recessive gold. Though always a favorite color, dominant gold mice are difficult to breed, with few golds in their litters, and they get fat. In 1968, I read in a scientific journal that there were recessive golds, with presumably none of these problems, and from the picture, just as attractive as the dominants. I had to get some. I found out that the Jackson Laboratories on the East Coast had them. This is a place that has strains of mutant mice to sell for scientific research. Even at \$7 a mouse, I was planning to buy a trio, but when I called to find out details, I was told that they don't sell to anyone but scientific institutions. While I was trying to figure the best way to get around that requirement, I was down at Barb's in late 1977. While I was there, Jim called and, among other things, told about some gold mice in a pet shop in Ventura. On our way home, we stopped there, and, in another large group of feeder mice was this beautiful gold male. I had no reason at the time to believe that he wasn't a dominant gold, but any gold mice are rare in pet shops, so I bought him. I put him with several black girls and much to my surprise, litter after litter arrived with no gold babies, all black. To make a long story short, he was recessive gold, though I haven't the faintest idea how he got to the pet shop in Ventura. Recessive golds came into our fancy, through this single male, with a whimper rather than a bang, since they cannot be told for certain from dominant golds except by breeding tests. And, of course, they have disadvantages, too, especially that they tend to have black-tipped hairs when young. But they do breed true, don't get fat, and the best develop brilliant orange color that cannot be matched by the dominant golds.

Everyone knows that we got all the fancy hair types from Barb's efforts, and I am no exception. I loved the satin the first time I saw it and long-hair was a nice little extra to go with it. Of course, I was dying to get some, but with the small stock Barb had originally, there wasn't too much available. I got a satin long haired black agouti female, a gold satin male who never bred, and several normal-furred half satins, in Jan. 1976. This stock was quite enough for me to establish satin and long-haired; frizzies also came along for the ride. My original strain, of course, was dominant gold. Most non-golds from it were agouti, which I'm not fond of, and I've been working since to clear it out. The creams that turned up, I separated into a separate strain; they are a beautiful subtle color. Pink-eyed dilution was also there, making "silver" as well as pink-eyed gold mice. Because one of my original half satin males had a Siamese mother, this color turned up in the gold strain, too. The first were agouti, which ruins Siamese and had to be cleared out. Once that was done, I combined my satin and original normal-furred Siamese into one strain.

Ever since I got into mice, what I enjoyed most was "playing with" genes. I've always read all I could get my hands on about mouse coat genetics, and I follow the scientific journals to see what's new. (Often we have new genes before they are described in the journals, by the way.) Anytime I get new color genes, I combine them with old ones, and see what new things I can come up with. Therefore, I spotted cinnamon, lilac, blue, and even beige, in addition to black and chocolate. I made pink-eyed blue, then spotted them, also chocolate blue. I saw what beige and blue dilution did to gold. I made "English golds" [Argente] and the warm off-whites that were triple-recessives of pink-eyed dilution, chocolate, and blue. I made white-bellied beige fox and selected the darkest beige to make the dark coffee color. Many colors I made and "sunk" long before I got associated with the fancy. Of course, I kept the strains I liked the best. Some colors, such as beige and pink-eyed blue are now well-known at our shows. But others, such as chocolate blues, have never picked up much following. I was already having a good time with my mice, but satins opened up a whole new world! What would all the colors I liked look like in satin? What fun to find out!

After dominant gold and Siamese, I decided to satinize blue. I've always liked normal-furred blue, but I didn't like the first satin I got, so I didn't keep satin blue. Next was beige. I was lucky with that one and got my first long-haired satin beige fox in my very first F2 litter, a real serendipity, considering the 1 in 64 probability for getting it. I really like the beiges in satin, but don't care for satin coffee. All this time I was wanting satins of my favorite spotted mice. I did the original cross very early, but I was as unlucky on that one as I was lucky on the beiges. There

must have been 100 to 150 baby mice born in my F2 cages, before I got any spotted satins, and the first were not even close to show quality. But these mediocre first ones were enough to get started, and spotted satins and long-haired satins came along rapidly then. I surely wasn't disappointed how they came out; they are beautiful and worth the hassle to get them started.

It was almost two years after I got the first satins that I got the recessive gold. Naturally, all other projects went on the back burner as I worked with this new color. The black females that the first recessive gold male was bred to were long-haired satins; I started satinizing the recessive gold with the first cross. By March 1978, I had the first satin long-haired recessive gold, a male. He was beautiful, healthy, and an important breeder. Later, I combined some of my spotted black long-haired satins with the recessive gold long-haired satins for something I've wanted for a long time: spotted gold long-haired satins. Though few of these are, even now, show marked, they are still very attractive mice. I'm also dabbling in recessive gold and Siamese frizzlies. Some of these have been quite spectacular, but there is still a lot of skin problems in them. And, just for the challenge, I'm now working on spotted gold long-haired satin frizzlies (mouthful!). I have reason to believe this is not likely to be a very fruitful endeavor, but I had to try.

Some might wonder where our hairless mice came from. Actually, the strain is several decades old, but I got them from some people from Santa Maria to whom I sold feeder mice. I don't know where they got them, but they thought they were so cute that they gave me a pair. I know that Cal Poly has hairless mice, too. I kept them for several years before Susan Melton [daughter of Barbara Melton] and then others got a few, and they started increasing in popularity. They even have their own variety at the shows now. The original pair were albinos, but the favorites now have black eyes, ears, and tail and come from black mice.

I've had a lot of interesting things "turn up" in my colony. One in 1972 is waltzer mice. These mice spend their waking hours spinning and head bobbing. Cal Poly got some of them from me and call them "hyperactive" mice, and they are a prized strain. Our fancy has taken no interest in them, however. Once in awhile, I get somatic mutations, odd color spots that do not inherit. One of the cutest was a spotted chocolate tan; a beige spot in the middle of her back made her a four color mouse. Whisker-eaters have regularly come my way, and although it is interesting to watch them do their thing, they really are nothing but a nuisance and have ruined some good show entries for me. The most recent "turn-up" is a mouse with a little bump on his head that, when he got his hair, became a furry tuft. He was born in a long-haired satin spotted tan litter. He has only mediocre spotting, but is very special, anyhow. Needless to say, I am very excited about this, and have every reason to hope that this tuft is inherited. If it is, it will be such fun to work on getting just the right colors and coat types to show off the tuft best.

Clearly, I enjoy the "experimental" part of raising mice, with one of the goals continually making more attractive or different mice. Showing is also fun, not only because one gets to show off the results of one's handiwork, but also because of the contact with other people who enjoy the little animals. Just as important to me, however, is producing good small pets for children and others. The mice should be friendly, and of course, healthy, as well as beautiful. My interest in mice as pets is how I started neutering them. I was so frustrated by the number of males that mice have, far more nice ones than one needs for breeding. But with their powerful urine odor and propensity for fighting, they really don't make good pets. Although I successfully neutered the first mouse I tried, it took a little while to work out the best technique. Neutering did everything I'd hoped, and it was quite a thrill at first to change unneeded male mice from a liability into cute little pets.

I cannot end without a word about my rats. They are, of all animals, my favorite pets. Ten years ago I bred black hooded rats that had everything: color, lovely personalities, and no respiratory disease. I'd love to have them back. I stopped breeding them because of loss of market, but continued to keep rats as pets. In 1975, I tried to find another pet, but the best I could find was so wide-eyed and leery that she had to be pried out of her cage. So when we went various places, I got the nicest hooded rats I could get and started breeding again. My major interest in rats is producing good pets, both for myself and others. I also neuter male rats and these big boys are delightful pets. Of course, if I get a good show animal, I take advantage of it. But good show marking is not the prime consideration for me in selection of the next generation of breeders. I have not done much "gene juggling" in rats in the past, although lately I've been doing a bit to try to understand how some of our new colors, and even some of the old ones, inherit.

I've been enjoying breeding little animals, especially mice, for a long time now. Association with other people who enjoy them, too, has added greatly to the pleasure.