Green-cheeked Conures and Their Mutations

Story by Rick Jordan, Photography by Richard Cusick

If there is one species of parrot that epitomizes “fun parrot-keeping,” it is the Green-cheeked Conure (*Pyrrhura molinae*). Imported in rather large numbers in the 1980’s, the Green-cheeked Conure never really attained its popularity until the first of its now many color mutations took hold in aviculture. In the United States, during the days of importing wild-caught birds, a few “strange” colored birds would arrive with each shipment of Green-cheeked Conures. This first color mutation had its own species assignment back then and was known as the Yellow-sided Conure (*Pyrrhura hypoxantha*). A stray Yellow-sided
Conure or two would be mixed into shipments of normal colored Green-cheeked Conures, and aviculturists interested in mutations began to group them and breed them.

This experimentation took only a few years until captive breeders proved that the Yellow-sided Conure was, in fact, a wild occurring mutation color of the Green-cheeked Conure. Today we often continue to call them Yellow-sided Conures or yellow-sided mutations, but the truth is that it is a sex-linked “opaline” mutation.

During the first few years of breeding the opaline mutation, virtually all of the resultant mutations colored birds were female. Of course looking back on that now, we realize it was because we were dealing with a sex-linked color mutation. This meant that normal looking male birds that carried the mutation gene could only produce mutation colored females when bred with another normal looking female bird. It was frustrating until someone finally got a split male (normal colored male carrying the opaline mutation gene) with a mutation colored female and produced mutation colored male offspring. From then on, it is history. The yellow-sided or opaline mutation of the Green-cheeked Conure became the first color mutation to be established in U.S. aviculture.

Actually, the U.S. may have been the only country at the time to establish this mutation evidenced by the huge demand for the bird in Europe and South Africa. Many opaline mutation Green-cheeked Conures were exported in the late 1980’s and early 1990’s which had led to the establishment of this color in other countries as well.
During the same time period that a few breeders were working with the opaline mutation, another mutation, then known as “fallow” was slowly becoming established in the U.S. True mutation fanatics (no offense meant) finally realized that what we were calling fallow, was actually a cinnamon mutation of the Green-cheeked Conure. It proved to also be a sex-linked mutation.

So, as the fun began, people breeding opaline Green-cheeks and those breeding the cinnamon somehow decided to mix it up a bit. This lead to the very first combination mutation of the Green-cheeked Conure called the “pineapple” mutation. You can thank Steve Garvin of California for naming this beautiful bird after a fruit. He continues to name mutations with strange vernacular. The truth of this matter is that the pineapple mutation is actually a cinnamon opaline. Since both mutations are sex-linked, it took a phenomenon called “genetic crossover” for them to occur. Strangely we have now proven that this crossover happens more often than not when a male bird is split to two sex-linked color mutations. So the beautiful bird with the yellow and red chest became established in U.S. aviculture and known as the pineapple Green-cheeked Conure.

Be aware that the opaline mutation does not produce exact replicas in each bird, as color may vary. Therefore some combination mutations may look different than others. Some
pineapples may have more red, some may have more yellow. But even this adds to the fun of breeding color mutations.

Green-cheeked Conures proved to be quite prolific in captivity. One of the reasons it became so popular as a cage bird was that it did not require huge cages or large nest boxes to breed. This meant that even people who lived in small apartments could keep and breed this fun conure. The mixing and breeding for mutation colors has increased its popularity as well.

After the passing of the Wild Bird Conservation Act in 1992, the imports of the Green-cheeked Conures and all other CITES listed parrots came to a halt in the United States. In Europe a new color mutation known as “turquoise” was becoming popular. So, later that decade a cooperative breeding program was established to import the turquoise mutation to the U.S. As predicted, the breeding of the turquoise Green-cheeked Conure was hugely successful. It was so successful, in fact, that within five years three generations had been bred from that small import out of Europe. The program was amended to allow the transfer of offspring to non-program members and the green-cheek, turquoise mutation became established in U.S. aviculture.

It proved to be true; once a mutation breeder and hobbyist, always a mutation breeder and hobbyist. So, the next step was obvious to the mutation connoisseur. There had to be some advantage in mixing the turquoise mutation with the now established cinnamon, opaline and pineapple mutations. That assumption proved to be exciting. The first combination to show itself on the market was the cinnamon turquoise mutation, followed closely by the turquoise opaline and turquoise pineapple mutations. This boost in varieties really gave the Green-cheeked Conure a shove in popularity, probably elevating it right to the top of the charts. Green-cheeked Conures and their mutations began to show up everywhere.

For several years no new color mutation arose, or at least were not widely advertised. But the little conure still maintained its popular spot near the top of the pet bird list. Its charming personality and ease of care made it a household name across the U.S. Sometime around 2004 or 2005, a few new “strange” colors were being produced and no one seemed to know what they were. Thankfully Steve Garvin did not name them after fruit.

One of these new colors is slowly being introduced to aviculture under the strange name “Sun Cheeks” (which to me implies a hybrid between Green-checks and Sun Conures). It turns out that the Sun Cheek is actually a combination mutation created when dilute, cinnamon, and opaline all appear visual in the same bird. So basically it is a dilute pineapple. (That should keep Steve happy). The dilute mutation may have spontaneously occurred due to line breeding. Once it was in the hands of knowledgeable mutation breeders, it was bred into pineapple and eventually into the turquoise mutation. Thankfully, that new combination did not receive a fruit name, but equally as bad, it is now called “mint.” Oh well, as Shakespeare
A cinnamon turquoise mutation of the Green-cheeked Conure and a cinnamon mutation

said, “A rose by any other name would smell as sweet.”

The list of mutation possibilities will soon take off and grow exponentially. A lutino mutation is being produced in Europe and it is only a matter of time before our stock in the U.S. produces this beautiful yellow color which will eventually lead to rubino (visual lutino opaline), too. Hopefully a true blue mutation and some dark factors will pop up somewhere soon. Then we can combine, breed, design and come up with the first purple Green-cheeked Conure. I look forward to the “Plum” conure in American aviculture.

The Green-cheeked Conure has proven to be one of the most fun parrot species to keep and breed and anyone interested in hobby breeding and color mutations cannot help but be attracted to it. With so many restrictive laws being passed prohibiting the keeping or sale of other parrot species in captivity, the true hobbyists will find enjoyment in mutation breeding. Another benefit is the increase in knowledge of genetics that comes with the territory. In order to get to that next incredible color, you have to know something about the transmission and genetic makeup of the color you desire.

For those that do not think the hobby of color mutation breeding is very scientific, consider how much has been learned through the keeping and breeding of the Green-cheeked Conure. In addition to proving how color mutation genes transfer, basically aviculture has proven that a former (Pyrrhura hypoxantha) does not exist in the wild as a separate species, and was a color mutation all along. This is something that would have taken many years to be determined through in situ study of the species and its biology. Yet in American aviculture, we proved it in only four years. Also, we now know that normal looking males carrying the opaline mutation gene also exhibit a physical sign. In other words, aviculture has demonstrated a way to determine if a male conure in the wild is carrying the opaline mutation by looking under its wings. If a male Green-cheeked Conure has the yellow flecking in the wing webs as pictured in this article, it can produce vividly colored female offspring formerly known as “Pyrrhura hypoxantha.”