

## THE SAN DIEGO WILD TURKEY HISTORY

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Early releases of wild turkeys in San Diego County were not well documented but included birds from Texas in the early 1950's. They were released by both public and private groups on both types of land including Noble Canyon of the Cleveland National Forest; near Case Spring on Camp Pendleton; and private ranches near Pine Valley. Forty years later surveys run by competent biologists as well as by interested volunteers found very few of the birds. This series of failures to thrive have been charged from time to time to one or all of the following:

1. too few birds released in the founding population;
2. damage to both the birds directly and to their habitat by the Laguna Fire (and several smaller ones as well);
3. the founding birds were not blood tested and mycoplasmosis has been found in the part of Texas where they were trapped; mycoplasmosis inhibits egg laying in private flocks and this may have occurred in the very small wild founding population;
4. trapped birds may have all been closely related coming from a small area of Texas (possibly as small as 3 hens and their broods), no records were kept at that time;
5. an array of other poultry diseases could have been contracted from back yard and/or from the numerous commercial breeders in and around Ramona at the time;
6. uncontrolled expert poaching by illegal immigrants from parts of Mexico where subsistence hunting was a way of life, they used a flashlight and a handgun;
7. Rio Grande turkeys from southwestern Texas are adapted to less than ten inches of rainfall with no snow and the areas in east San Diego County where they were released gets 40 inches with some snow. Hens were unable to protect their poults from that much rain;

8. training methods, including live firing and burning brush along with tracked vehicle cross country maneuvering at Case Spring and other areas of Camp Pendleton may have outright killed the birds or destroyed their needed habitat in the first or second year of their release;

9. Illegal augmentation of the wild population by well meaning but uninformed members of the public through releases of domestic stock turkeys that were not wild and lacked the genetic character to live in the wild may have damaged the genetic stock of the wild turkeys captured from the wild and introduced to the east county. These domestic stock turkeys derived from a central Mexico stock that is now extinct are of a separate subspecies and have failed to establish wild breeding populations anywhere in the country but are a continuing problem where they are still being released as augmentation for a free breeding flock. They don't help. They hurt to the extent that their genes get mixed up with the wild birds which fail to reproduce. This is in addition to their being a vector for diseases they have been inoculated against while the wild birds they mix with are not.

Given this back ground and faced with a large demand for releases of wild birds in other parts of the state no other releases were tried in San Diego for more than thirty years. The first modern release of nearly 300 wild trapped turkeys was completed in the spring of 1993. Two hundred and thirty birds were moved from extreme south eastern Kansas, twelve were brought in from San Luis Obispo County and sixty three were released from Aerojet-General property east of Sacramento near Folsom. The San Luis Obispo birds were the first turkeys to wear tracking devices in California.

The subspecies involved were predominantly Rio Grande with some blood from the Eastern subspecies originating from the native populations of eastern Missouri. The hybridization of these two types of turkeys was complete before they were trapped and moved to San Diego. There is no documentation of Merriam's subspecies of turkeys being released at any time in San Diego County.

Kansas was one of the states that lost their turkeys entirely during the dust bowl of the late 20's. It took decades for Kansas to rebuild their soil to the point where it would support enlightened farming. During this rebuilding period Kansas watched Oklahoma to their south repopulate their wild turkeys with Rio Grand subspecies birds from Texas where a surplus had existed for many years. These Texas turkeys were causing problems for ranchers trying to feed other forms of stock and were unwelcome. Oklahoma needed birds as their habitat was recovering faster than the more open prairies of Kansas. With the introduction of the cannon net the numbers of birds exported from Texas grew rapidly providing a fine founding population of Rio Grandes in Oklahoma. Kansas soils began to support more farming and commensurate numbers of wildlife and they agreed to take the surplus birds now being made available by Oklahoma. Cannon netting made this movement even easier and over about a 20 year period Kansas turkey populations rebounded. During this period a natural radiation of eastern subspecies turkeys in Missouri where they had not been so severely damaged by the dust bowl storms began to react to the improved habitat in southeastern Kansas and began to spread to the west into Kansas where they hybridized with the Rio Grand stock brought from Texas via Oklahoma. Over 200 of the birds introduced to the Julian area of San Diego County in 1993 carried this genetic back ground.

They were readily able to take on the environmental problems associated with the west facing coastal mountains. Texas Rio Grandes are able to make a good living in mesquite patches of very low rainfall. Turkey habitat in El Paso looks like a slightly wetter version of the high desert around our Barstow. Like the Mojave River running through Barstow, the Rio Grand River and several other large streams like the Red River and the Cimarron drain a lot of snow water out of the east facing slopes of the Rockies and provide the large trees needed by turkeys for effective roosting cover.

Eastern turkeys on the other hand do well in much wetter conditions where even hurricane rains don't wipe them out. Hybrids of the two have found that the coastal totals of 10 inches in this county are good for the birds with predominantly Rio Blood while the 40 to 50 inches of rainfall at Lake Henshaw and Mount Palomar are well liked by the birds with predominantly eastern blood.

While the outer appearance of the two subspecies is very similar, the key to their differing successes in differing rainfall patterns comes in the way they protect their downy young from rain. Down on a turkey poult does not protect it well from rainfall and hypothermia resulting from a three day rain storm can kill anything that is not able to get under its mother's wings. Hens in western Texas rarely see rainfall during the ten days or so at the time of year that their poults are downy. Poults fly at ten days and have good body covering at two weeks but still need the warmth of their mother's skin to keep them warm at night. Eastern turkey hens brood their chicks on the ground and can give them better protection than the Rio Grande hen who gets the poults off the ground and up into the branches of mesquite bushes away from small predators but doesn't normally find heavy enough branches to support the brood up close to their bodies. Poults from a predominantly Rio hen are much more subject to heavy rain losses than the eastern poults. Hybrid vigor has proven useful to this population of wild turkeys.

When a court in San Diego required the Department of Fish and Game to investigate the possibility that wild turkeys might possibly be having a detrimental affect on any form of endangered plant in the back country the Department began trapping and radio marking many turkeys. This entailed an extensive baiting program to acquire information on birds in many of the plant associations in the county. A dozen different bait sites were set up and monitored daily for use. When use of the bait site was predictable, drop nets were installed and captured enough birds for the study. Over a three year period no damage to endangered plants was discovered. In that process the numbers of birds in similarly occupied habitat could be estimated. In 2001 the number was a cautious estimation of 20,000. There has been a great number of range extensions since then and the number is much higher. Turkeys are now using much of avocado and citrus groves of the north county and have taken residence on many of the golf courses there as well.

That brings this history to the present when several flocks of sixty or more have been classified this past spring. I have counted over a thousand birds this August with the average brood size right at four poults per hen. Many of the poults are larger than their mother now and the families are banding up. Turkeys are doing well in San Diego County.