

Producer Grant Final Report
Minor Breed Turkeys
Project # FNE94 - 38
Growth Rate and Eating Qualities

1. The original goal of this project was to see how well the older breeds of turkeys would raise on pasture compared to the commercial breeds in our greenhouse raising system. We hoped they would do well for several reasons:

- * we feel it is important to preserve these breeds for future breeding stock
- * we anticipated that they would still be able to breed and raise young normally, unlike commercial breeds
- * raising birds on pasture would be more economical and more "sustainable" than regular management practices
- * we are looking for a turkey that finishes at a smaller size than commercial breeds
- * we felt they would be hardier than the inbred commercial birds
- * they are more attractive looking than the white commercial birds, and would be more appealing for us and our farm customers to look at

2. Since we received our grant in the Spring of 1994, the information about our farm has not changed radically. We operate a diversified farm on the coast of Maine, using approximately 5 acres, including 6 greenhouses (for seedlings and poultry). We grow and sell the following, all raised on drug and hormone free diets that include no meat products:

Chickens	10,000/ yr
Turkeys	500/ yr
Ducks	200/ yr
Geese	75/ yr
Eggs	15,000 dz./yr
Pork sausage	1,500lbs/ yr
lamb "	500 lbs/ yr
seedlings	2,000 flats
Plus organic vegetables	

3. We didn't have any formal cooperators in this project which was too bad. However, in our area, there aren't any people who have much knowledge or interest in anything other than sheep and beef!!

4. The plans for our project were to:

- * fence in and seed down a pasture
- * purchase what heirloom breed turkeys were available
- * raise them on pasture with the minimum grain necessary
- * slaughter some of each breed and compare the carcass weights and quality between the heirloom breeds and the commercial birds we also raise
- * keep the majority of the turkeys to breed and assess their breeding & poult rearing capabilities

What we actually did was purchase 7 breeds of turkeys. Unfortunately, 2 of them were so weak that they didn't survive the brooding period. These were

the Lilac Slate and the Blue Slate breeds, and we found out later that the blue colored ones aren't as hardy as the rest. We were left with Bourbon Reds, Black Spanish, Royal Palms, Narraganset and the only white ones, the Beltsville.

Originally, we were going to try to raise them on pasture, however, that spring it rained real late and we weren't able to get the seeding done on time, so we built separate pens for each breed so we could make observations as to how they differed in their growth habits. The feed was the same as we use for the commercial birds, a corn, soy and mineral mix.

5. Our findings:

* Right from the beginning, it was obvious that these were a different kind of bird from the commercial ones!! They were flying around the pens way early and never quit! We came to realize that we wouldn't have been able to raise them on pasture without "roofing" over the pasture with netting, which would have been cost-prohibitive big time. So maybe the late spring rains that year were a blessing in disguise.

* All of the minor breed turkeys developed a much longer frame that didn't fill out as fast as the commercial birds.

* They didn't eat anywhere the feed that the others did either. In our estimate, they ate only about 1/2 as much per day.

* Because all the minor breed turkeys we raised are very active birds that love to fly, they sure were different at the table! In the fall when we were processing the turkeys for the holidays, we did a few of the breeds from this project. Well, that was where we could really see that as eating birds, they aren't saleable. At the same age as our commercial birds, these barely weighed 8 pounds dressed for the hens and 11 pounds for the toms. This compares to 14 for the commercial hens and 17-20 for the toms. Well, before you think we have come up with the small turkeys we are looking for, there is also eating quality to consider. They were muscled up like beef, and therefore tough as shoe leather. Also, there wasn't any finish to the carcass which was part of the problem.

The only possibility was to try to keep them longer to see if they would get better. This is what we did, however the results never got better. About the only use for them as meat was to boil them and make turkey broth out of them. A very expensive broth!! Finally, we gave the remaining ones away at our local fair in the fall of 1995.

* The birds we had didn't make very good natural parents which really surprised us. We figured that would be a plus to the old breeds. Not that we could figure what to do with the young if they had hatched them! We did get a few, but not many.

* They seem to have a real resistance to common turkey diseases. Turkeys are very susceptible to a disease called Blackhead, particularly if they are raised anywhere near chickens. We ran a few right in with our chickens and never had one get blackhead. In fact, we have two toms that we kept for pets that have been in with them for two years and have had no problems.

* These older breeds are really hardy & have retained the instinct for survival in the wild, while commercial breeds don't have any common sense left at all. The two pet toms stayed out all last winter and roosted in trees or on anything horizontal to the ground. They haven't been bothered by predators (of which we have a lot) or the cold Maine winters.

* They sure have a much milder temperament. We never observed any cannibalism in the flocks even after we combined them this spring. This was a nice surprise as the commercial birds are very mean and real difficult to combine.

The one possible bright spot is the Beltsville birds. They had been developed to fill the small bird market, however they weren't ever much as a pure breed. We still have a male and two hens that we are going to try to breed this coming spring and we will keep two commercial hens to breed to the tom. This offers some hope, the problem being that as full time farmers, it is hard to find the time to spend doing the genetic work involved. But we will try !

6. No site info relevant to our project.

7. As to any economic results, all I can say is that we sure lost a lot of money with this project. Not only in the feed costs for keeping them long enough to see both their carcass quality and breeding ability, but in the penning that we built to maintain the separate flocks.

Due to the poor carcass quality, there were no financial benefits to raising these birds. We did sell a few dressed birds to people who were supportive of our project, and we ate a few ourselves, but we couldn't successfully sell these to our customers.

As to financial benefits from raising them, I think the only one would be to raise them as pets or mascots, and to keep the genetics in existence for future breeding programs, as some of the above traits would be good to breed back into the current commercial birds. However, this would be more of a hobby situation.

8. We have decided that what we need to do is to start more batches of turkeys so we have a greater variety of bird weights for our customers. This creates a problem in that that means more brooding and space, but that might allow us to use the pens we built for this project !

9. No. See all of above.

10. We tell them of our findings with these birds, and that for a farm trying to do this as a profitable part of the farm, you can forget it. However, we also tell them that they are hardy, disease resistant and attractive looking, and that it is important that people keep raising them to preserve the breeds and the gene pool.

11. We took the different birds to two county fairs (the estimate would be over 10,000 people saw the display) for two years and had them on display in a large fly cage. This allowed them to be displayed at their best. We had

many posters up explaining their traits and history as well as explaining why we were doing it. We also had a poster with the copies of our proposal to you and the resulting grant approval along with a statement that might entice others to apply. We also have two on farm open houses each year where the same posters were used to show them off. We also had a local newspaper do an article on the birds. However they changed the direction and ended up doing the article on the whole farm with only a small mention of the turkeys. And nothing about you !!

In conclusion, we feel that this while this has had some good aspects, that overall, these turkeys aren't something that we could sell to anyone for their holiday meal. And to do any genetic breeding would require much more money and time then we have to commit to at this time. We do feel that we can safely say that they don't represent any economic consideration for meat producing farmers. Only for bird fanciers who should be encouraged to continue to breed them so we don't lose the genes. There are only three breeders of commercial turkeys in this country, so a genetic problem could arise where these birds might be needed to recreate the steps we took to get to the birds of today.

Thank you for the opportunity to attempt this project. I am sorry I didn't get this done in a timely fashion, but we were hoping to find a positive outcome to report. Also, since we do all this work on the farm without hired help, there are only a few days a year to find spare time to type. It snowed last night, so we have a little time today !!

Sincerely,

A handwritten signature in blue ink that reads "Anne Bossi". The signature is written in a cursive, flowing style.

Anne Bossi
Sunset Acres Farm