The Charles Fish Family, Farm, and Barn about 1850

When the Charles Fish family built their barn about 1850, they owned a farm of 140 acres located west of Pennington Borough on the road to Lawrenceville. Today this is Federal City Road. This farm appears on maps in 1849, 1860, and 1875. The 1875 map above shows the location of the farm and its neighbors about three years before they sold it. Of special importance to the Fish farm is the grist mill on Stony Brook, marked GM on the map, just across the road.

The 1850 Charles Fish farm had120 improved acres devoted to field crops, grazing, etc. Twenty acres were unimproved and probably contained the necessary woodlot from which the family obtained firewood and perhaps some building lumber. The farm had appreciated in value from $5000 in 1838 when it was purchased to $7000.

In 1850 the adults in the family were the three unmarried siblings, Andrew, Charles, and Margaret. While Andrew and Charles jointly owned the farm, Charles generally appears to be the head of the household. The three siblings were in their prime with Andrew age 56, Charles age 40, and Margaret age 30. The only child in the family, Joseph Fish, was nine and becoming useful as a farm laborer. Joseph played the role of son in the family and helped out on the farm while growing up in the 1850s and early 60s, during the time the barn was built.

By the mid-19th century, non-family farm labor was becoming scarce and expensive and farmers had to rely more on their children. Families tended to be large with many children born over a lengthy time span and families without children had to hire whom they could. Farm laborers were generally men hired by the day, month, or year. Day laborers were often young boys from nearby farms or villages making a little pocket money or men from the villages employed during peak times of need. A long-term hired man might live with the family or have a separate home for his family. Sometimes young immigrant men would live with a farm family for a period before moving on. Farmers frequently complained about the frustrations of working with transient laborers who might be unskilled, lazy, or drunkards.

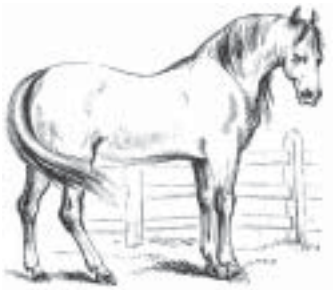
In 1850 the Fish family consisted of at least three farm laborers – Andrew, Charles, and young Joseph Fish. Margaret probably engaged in farm labor more than the average woman and considered herself a farmer. In addition, a nineteen year old boy from Holland, William Casshman, was living with them as a farm laborer and fifteen year old Grace Howell was living with them as a household worker. Throughout the mid-19th century the Fish family clearly had to supplement their labor with hired hands. Some of these hands appear in the decentenniel census returns. Two left their names and date of work scratched into the timbers of the Charles Fish Barn. In 1861, 12 year old W.F. Lemon engraved his name into a purlin high up in the roof of the barn and in 1880, after the farm had been sold to the Baldwin family, 19 year old John Smith, who was boarding as a farm laborer on a neighboring farm, and may have been hired out to the Baldwins, engraved his name.

Much can be learned concerning the Fish farm from the 1850 and 1860 US Census Agricultural Schedules. Also, an inventory of the farm taken in 1873 upon the death of Andrew gives insight to their farming practices. Using these documents we can learn how the Charles Fish Barn accomodated some of their livestock and was used to process and store some of their crops. In addition, we can better understand the changing nature of farming in the mid-19th century and how structures like the Charles Fish Barn were an integral part of these changes.

Livestock and the Charles Fish Barn ca 1850

One reason the Charles Fish Barn had been built larger than average was that livestock was increasing in importance on 19th century farms. The floor plan of the barn shows that space for animal stalls took up almost half of the ground floor area. Additional storage area for hay and grain to feed the animals was also needed. For example, in the mid-19th century cattle feed might consist of ground corn ears, corn meal, buckwheat bran, and pumpkins, when available, in addition to what the cows ate in the pasture. Livestock manure accumulated in piles near the barn and, after many of its nutrients were washed away, was laboriously spread by the cartload on the fields as fertilizer. While the Fish family did not have a huge number of livestock, in 1850 the value of their livestock was $590. Of their animals, horses and cattle were most associated with the barn.

Horses



Horses were increasingly important during the 19th century as farms became more mechanized and there was generally more hauling of hay and grain to the barn, produce to market, lime and other fertilizer to the fields, and trips to the village to buy supplies. Horse powered equipment was increasing in variety and we know the Fish family was using some of it, especially the horse treadmill powered thresher.

From the 1850 and 1860 Agricultural Schedules it appears that the mid-century Charles Fish farm usually had about four horses. Like most New Jersey farmers Charles and Andrew probably bought their horses from western dealers or at auction, rather than breeding their own stock. Farmers had to choose between having horses that were fast, good looking trotters or pacers and good solid work horses. Was Charles the type of farmer who seemed to take more pride and care of his buggy and road horses, or was he one who spent more effort on his farm equipment and work horses? We just don't know.

Milch Cows and Other Cattle

By mid-century there was an increased market for dairy products such as butter and in 1850 New Jersey made its first effort to count dairy cattle separately from beef cattle. Three-fifths of the state's cattle were classified as dairy. At the Flemington Fair in 1856 prizes were given separately for beef and dairy cattle. In 1850, though, this trend was in its early years and for most farmers dairying was still a minor part of their business. Their few, general purpose cows mainly provided the family with dairy products and meat.

The 1850 and 1860 Agricultural Schedules show that the Fish family normally had about five or six milch cows and a smaller, varying number of other cattle. The other cattle were the natural result of maintaining the milking cows and are rather transient, waiting to join the dairy group or to be sold to market. Most milk was converted into butter or cheese which kept better. The 1873 inventory of the Fish farm lists dairy fixtures and a churn in the basement of the farmhouse and in both 1850 and 1860 they reported making 500 pounds of butter from the milk of their milch cows during the previous year.

Other Animals on the Charles Fish Farm

In 1850 the Fish family had 18 sheep and they had produced 60 pounds of wool the previous year. The need to keep sheep for a supply of wool to make into clothing for the family was rapidly declining in the 19th century with the availability of factory produced cloth. Since mutton was not a particularly desired meat, selling surplus animals was not always profitable. After 1837 there was a general decline in the number of sheep in New Jersey and it is not surprising that in 1860 the Fish farm had none. 1870 is the last record of any sheep on the Fish farm.

During the 19th century selective breeding of swine was changing their characteristics to a greater degree than any other animal on the farm. An increasing demand for fat pork and greater reliance on corn for feed encouraged an emphasis on size when evaluating hogs. For the most part, hogs provided farm families with meat and lard and also some cash when swine were sold. The $120 value of slaughtered animals recorded for Charles Fish in 1850 probably reflects the marketing of his hogs. The roughly 15 hogs on the Fish farm at any one time were probably not kept in the barn, but rather in a shed of some kind with a fenced area for their wallow.

Poultry are not enumerated as part of the 1850 agricultural census but it is very likely that the Fish farm had a few to supply the family with eggs and meat. Perhaps enough eggs were produced to sell some, but this was just a plus, not a major factor in the farm economy.

Crops and the Charles Fish Barn ca1850

The Charles Fish Barn was designed to be a crop processing center, especially for threshing grain crops, and a storage area for crops, especially those used for animal feed. The threshing floor was the work area for processing grains while the granary was a storage area for grains and the loft, or mow, accommodated the large hay crop.

Wheat - The Charles Fish Barn was built to process wheat. Its threshing floor with swing beam was designed specifically for this crop and in 1849 the family threshed 155 bushels. Wheat production had declined greatly in New Jersey in the early 19th century, however, the use of higher yielding types and calcined lime as a fertilizer brought something of a resurgence by mid-century. Farmers learned to deal better with the problems encountered in growing wheat, such as Hessian Fly and black stem rust but wheat production did suffer in the competition with western wheat that was cheaper to grow.

Buckwheat - In 1849 the Fish family threshed 71 bushels of buckwheat in the barn. Buckwheat was used widely as a popular feed for swine and poultry, not to mention the popularity of buckwheat cakes for humans. Since buckwheat was sown in the summer, it was a crop that could be grown on land where other crops could not be grown due to weather or other conditions. It was generally sown by broadcast and then harrowed in. The amount of buckwheat grown in New Jersey was generally consistent between about 1840 and 1870 before a sharp decline set in.

Rye - In 1849 the Fish family threshed 20 bushels of rye. Rye never seemed to be as important a crop as wheat in New Jersey and went through periods of growth and decline during the 19th century. It was generally grown in places where wheat or corn did not succeed, as a kind of back up crop that could at least make some profit. It is grown and processed just like wheat and this crop was also associated with the Charles Fish Barn.

Indian Corn - In 1849 the Fish family shelled 600 bushels of corn. Corn was a very important crop in New Jersey in the 19th century and the amount grown increased throughout the century. During the century breeding preferences caused the stalk to shorten and the ears to become shorter and fatter, while interest shifted from fast maturing types to those with greater yields. It was an important feed for animals, especially cattle and hogs, and quantities were probably stored in the granary of the barn.

Oats - In 1849 the Fish family threshed 657 bushels of oats. Oats were a versatile crop renowned as a grain feed for horses and also useful as a nurse crop for grasses and clovers. Some of the oat crop could be cut early for use as hay and the rest left to mature for its grain. Oats were typically sown by broadcast and then harrowed to cover the seeds. Generally, the following day clover would be sown the same way in the same field. Around 1850 the oats crop was on the increase in New Jersey.

Hay - In 1849 the Fish family harvested 50 tons of hay. Throughout the 19th century timothy was the most popular crop for hay. It had a high reputation as feed for horses and was the easiest hay crop for cutting with the scythe. Some was usually saved for seed and was threshed in the same manner as wheat. The seed had a ready local market, just as the hay did. It is likely the Fish family grew timothy and the hay was be stored in the loft, or mow, of the barn.

Clover seed and other grass seed - In 1849 the Fish family threshed 12 bushels of clover seed and 5 bushels of other grass seed. In the mid-19th century, clover was gaining in popularity as a crop. The need for seed was great and producing seed could bring a very good profit. The seeds are small and threshing was laborious. Clover was often sown with timothy and used as animal feed.

Irish Potatoes - In 1849 the Fish family harvested 30 bushels of potatoes. During the mid-19th century farmers grew potatoes primarily to supply their own families and perhaps a small surplus to sell. In the 1840s a potato variety called the Mercer became very popular in its namesake New Jersey county and perhaps the Fish family grew one or more of its variations. Potatoes may not have been associated with the barn unless some were stored in it from time to time.

Farming Implements and the Charles Fish Barn ca1850

In 1850 the Fish family had $320 worth of implements and machinery. The mid-19th century was a time of invention and constantly improving farming machines. But many farmers were conservative and waited to see convincing improvements before making a change themselves. The Fish farming techniques must have been pretty basic in the 1850s since they only had a few and very basic machines listed in the 1873 inventory.

Altogether, the 1873 inventory does not reveal an interest in the variety of machinery that was available. By 1891, however, when Charles died, his inventory, for a much smaller farm, reveals a much wider and more up to date variety of machinery. This may be an indication that like a number of farmers he was rather conservative and slow to adopt new methods and machines. If this is true, it didn't keep him from prospering even in his mid-years about the time he built the barn.

To prepare the soil for planting Charles and Andrew spread manure by loading it on wagons and using pitch forks to throw it off onto the fields. Like other farmers of their day they probably let the manure accumulate near the barn where rain and weather washed away many of the nutrients. Farmer diaries of the period indicate it could take up to several hundred loads to completely spread the manure on the fields.

To turn the soil and begin the process of creating a seed bed Charles and Andrew used walking plows, very likely Deats plows made in Stockton, New Jersey by blacksmith John Deats, to prepare their fields. We know that Charles had two Deats plows when his inventory was taken in 1891 and there are two plows of unknown make in the 1873 inventory that could be the same ones.

To pulverize the soil after plowing they used a harrow consisting of two, hinged together rectangular wood frames with iron spike teeth. After 1850 iron frame harrows began to appear. They may also have used a home made drag of squared lumber or a manufactured roller to help prepare the seedbed.

While horse-drawn machines to plant seeds were becoming available in mid-century, many New Jersey farmers were slow to adopt them and continued to sow seeds by broadcast scattering or hand planting in hills. In the inventory of 1873 no seeding machines are mentioned. This may be an indication that Charles preferred the old method.

Once plants were coming up competing weeds needed to be kept under control by using a cultivator. The corn cultivator was in use by about 1820 and could be easily made by a blacksmith. It was a simple wooden frame with several short-necked shovels attached that dug up weeds and loosened the soil when pulled between rows of corn by a horse. The farmer walked behind and guided the cultivator with a pair of wheelbarrow-like handles. By 1850 it had been improved and new ones were pulled by a team of horses and worked on both sides of a row rather than the middle area between two rows. The Fish farm had a cultivator in 1873 but we don't know what type or what type was used in 1850.

By 1873 Charles had a mowing machine but he may still have been using the scythe and cradle in the 1850s. Reapers were also available during the 1850s but the 1873 inventory does not mention one on the Fish farm. Even diaries of fairly progressive farmers in New Jersey show a preference for the scythe or using a combination of scythe and horse drawn reaper depending on conditions.

To harvest mown hay the Fish family may have used some version of the horse rake that first appeared about 1820. The 1873 inventory lists forks and rakes but nothing to indicate there was a horse drawn hay rake. In 1850 many farmers were still loading hay onto wagons using pitch forks and taking it to the barn where it was again moved into the mow with pitch forks.

Threshing grain was going through changes in the mid-19th century. Horse powered machines involving a long sweep or shaft appeared in the 1830s and in the 1850s newer treadmill, horse powered threshers were coming into use. The 1873 inventory lists a "Horse Power & Thresher" that was probably of this type. It is very possible, though, that in the 1850s, Charles and Andrew were still using the flail or were having their horses walk on the grain harvest on the threshing floor of the barn. That is how the barn was designed and farmer diaries from the 1850s were still describing this method.

The horses kept in the Charles Fish Barn provided much of the power for the farm machinery and the crops harvested from the fields were processed and many stored in the barn. Some of the machinery may have been stored in the barn. In these ways their barn was truly the center of the agricultural operations for this Mercer County family.