



Middle Creek in Motion

Fall 2021

The History of Middle Creek Chapter 2: The Millstone

A “mill” usually refers to either a manufacturing process, or a hand-operated process for making a product smaller in size in one way or another.

The process of creating a millstone from quarry to the mill: The stones are roughed out for overall size and shape at the quarry. To split the stones in two, holes were “drilled” (pounded into the rock with a special chisel) on a straight line around the stone. Wedges were systematically pounded into the holes until the stone split. Using a piece of string and a scribe of some sort (usually a piece of slate), the center of the stone was located, and a circle was drawn to indicate where to trim the excess from the stone’s edge to make it round. A hole was chiseled into the center of each stone. The top stone, otherwise known as the “runner stone” would have a special cross-shaped area called a “Spanish Cross” chiseled out of the underside for the drive mechanism to spin it from beneath. This is the runner stone and was about 16-20 inches thick. The other stone (bed stone) was about 8-12 inches thick and would have a square hole for the shaft bearing which would come up through the floor of the mill to turn the runner stone. It would take two workers and the foreman about a week to make a pair of millstones. **(Continued on Page 2)**



Photo by Shan Lake



Photo by Beverly Lightcap

What’s New?

You may wonder where the Summer Newsletter went. Like many things at Middle Creek, things are always in motion. The summer newsletter was never created due to some staff changes, however, no worries as it is back for the fall!

Some other changes around Middle Creek, habitat wise, that you may have noticed is the lake being drawn down. This was intentionally done to expose mudflats that serve as stopover habitat aka feeding areas for southbound migrating shorebirds (sandpipers, yellowlegs, plovers, etc.) and to allow plants to gradually grow and produce seeds just in time for hungry migrating waterfowl to stop by and feast on them!

What’s Coming Up?

Although the Conservation Heritage Museum is still a work in progress, we will be opening up the Visitor Center for the annual **National Hunting and Fishing Day on September 26th**. Local sportsmen’s clubs and conservation groups will be joining us to celebrate!

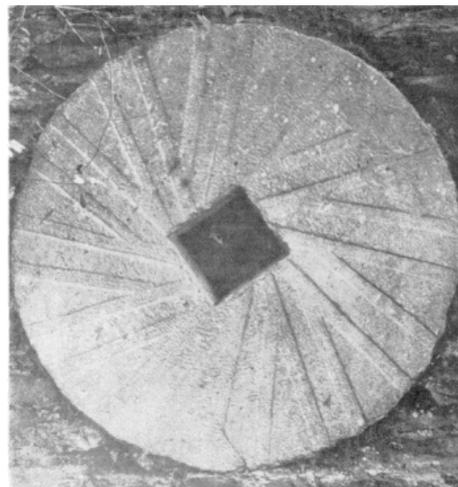
The History of Middle Creek

Chapter 2: The Millstone

The workers rarely worked at the craft for more than nine years. The work was hard and the dust from the stone dust caused silicosis in the lungs. The foreman, in charge of several groups of workers would finish the stone. He was the only one permitted to create the hole in the center of the stone.

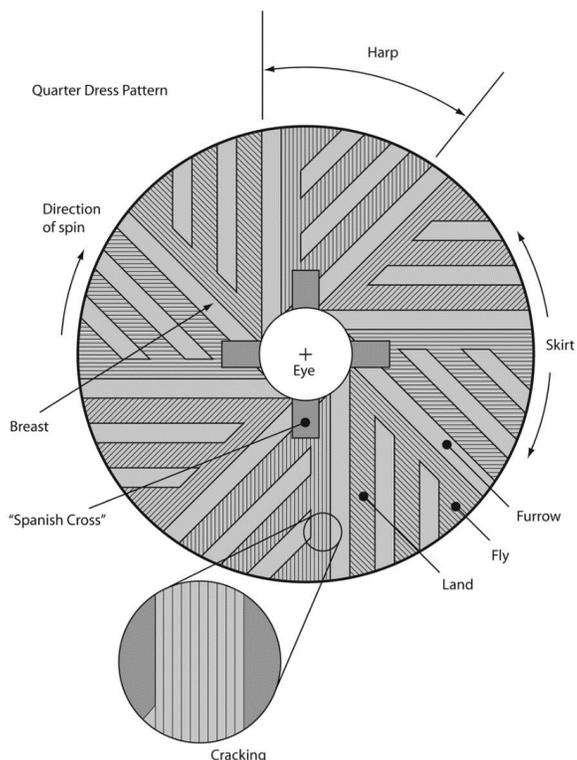
A busy mill would need the stones redressed (resharpened) about once per month. A dull stone heats up the grain ruining the texture and makes it sticky. It should cut the grain like scissors cut paper.

Cocalico millstones were made and sold between 1820 until about 1910. The “heyday” for Cocalico Millstones was in the mid-1800s, but prior to that the stones were worked by families for various purposes on family-owned lands. Most rocky areas prior to 1800 were not owned, because the land could not be tilled. As a result, the stones were free for the picking to whomever could use them.



A Typical Cocalico Bed Stone for grinding cob corn.

Taking a close look at the stone atop Millstone Trail, it becomes apparent that the stone has a couple of peculiarities. It does not have holes in the sides for lifting it to dress it at a grain mill. It has a square hole in the center which usually indicates that it was to be a bedstone. However, it is too thick to be a bedstone. The square hole would have been the last accomplishment in making the stone, so it was not meant to be split. The stone atop Millstone Trail was being created to be a runner stone, but for what?



Middle Creek’s millstone was being created for a Pomace mill. Pomace is a term used for pulpy residue left when fruit is crushed, in this case, most likely apples for making cider!

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The History of Middle Creek *Chapter 2: The Millstone*



In the photo to the left, the apple pomace would be taken into the barn to the cider press.

Cider was a staple at most dinner tables and was often treated like a food item. A lower alcoholic version of cider called ciderkin was usually served to children. It was usually made by adding water to a second pressing of the pomace. The leftover pomace was usually used to feed hogs.

Nature spent millions of years cementing the pebbly conglomerate stone used to create the millstones. Over 200 years after the creation into a millstone, we still can still feel the stone-cutter's anguish when it cracked, as we look at that stone and envision the past.

"The History of Middle Creek. Chapter 3. Native Americans" will be in the next issue of Middle Creek in Motion.

Dan Lynch: Reflecting on 27 years of Service

Featured in this quarter's newsletter is longtime Game Commission employee Dan Lynch. Dan recently retired as a Wildlife Education Specialist and Deputy State Game Warden for the Pennsylvania Game Commission. He has been involved in wildlife education for 27 years and teaches a variety of classes including wildlife sign and tracking, bird and mammal identification, wildlife forensics, hunter and trapper education and many others. He is an avid outdoorsman and is actively involved in hunting, fishing, trapping, camping, and hiking. Interviewing Dan for this article is Jordan Sanford, Dan's Biologist Aide/Education Technician, and friend.



Jordan Sanford: Tell me about your background and job history

Dan Lynch: I graduated from Delaware Valley College in 1986 and I received my bachelor's degree in Large Animal Science. I ended up getting a job in New Jersey managing a black angus farm, and did that for about 3 years. Then I came back to Pennsylvania and I worked for a company called Atlantic Breeders which was breeding dairy cattle via artificial insemination. And then I went back to Penn State for a year to get my teaching certificate. After I got my teaching certificate in Ag Ed and General Science, I got a job at Kutztown High School teaching K-12 agriculture science. I was there for 4 years. I had contacts with Game Wardens in Berks County and I would have my kids go with them all the time to do shadow days. They were allowed to do that, we don't really do that now, but they would come back and tell me how cool it was, and I thought, "boy I would like to work for the Game Commission". The Game Wardens told me that this job was going to happen and it would've been 1993, the end of 1993. I applied, got the job, and started in July 1994!

JS: What is your role in the agency?

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DL: I am the Wildlife Education specialist for the Southeast Region of the Game Commission. And my primary thing to do is to working with students, from kindergarten to college, and teachers to teach them about wildlife and environmental science. And I'm also a Deputy State Game Warden, which I started in 1995.

JS: What's the coolest part of your job?

DL: The coolest part of my job is being able to do something different all the time.

JS: Okay, and what's the most rewarding aspect of your job?

DL: I guess maybe when you are out doing something else and you end up talking with somebody who you've already done a program or a teacher workshop for and they remember it or they use some of the stuff you've done.

JS: Cool! Alright, what are some challenges you've faced while working for the Game Commission?

DL: *Laughs* Um challenges... the challenge would be, explaining the value of education to other folks. Not everybody, but some folks. That's a challenge.

JS: If you could pick one favorite memory while working for the Game Commission, what would it be?

DL: Hm. Favorite memory. Well...

JS: *Cough* getting Jordan as an intern *Cough*

DL: Yeahhh that's it. *laughs* Actually, now towards the end of my career, that has renewed my motivation, to continue to do stuff that I'm already doing so that is pretty cool. But I think one of the cool memories would be, since I was also a deputy, was that I got to bring my kids along to do a lot of the wildlife stuff. We would always have wildlife at home, and the kids were always involved in that, and the fact that both my kids now are in the wildlife field now, is kinda cool.

JS: That's pretty awesome!

JS: What are some professional skills/strengths/weaknesses you've gained from working for the Game Commission?

DL: Nunchuck skills? *laughs* Okay, so one of them is just gaining the knowledge from other people who work for the agency. Biologists, foresters, land managers. Learning all the types of wildlife management techniques that we do, so, working with others who are professionals in the agency that's one cool skill I've gained. Knowing how to communicate with non-government organizations to get them to become partners and things like that, that was something I did early on.

JS: Can you give me an example?

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Photo by Melodie Bechtel

DL: Sure, I think one of the organizations that was really beneficial to me and wildlife education, is the Wild Sheep Foundation. They were, and still are, very proactive in the Game Commission with wildlife education so.

JS: Do you have any advice for someone hoping to work for a state agency or at a higher level?

DL: Never chase parked cars. My advice is that when someone asks you to do something even though its not the main part of your job that you should always say yes and give it a try, because you just never know when you start doing it and who you start working with, how that person or people can help you in the future. So always say “yeah I’ll give it a try.” And when someone says “hey, do you wanna do this?” Say yes. And I think that’s good advice

JS: I think so, too.

JS: What do you like to do in your free time? Any plans after retirement?

DL: I like to trap, hunt, and fish and camp. And I plan on doing all four of those things with my wife and friends as soon as I retire.

JS: The last one, to wrap it up. If you could be any mammal, which would you be and why? (classic wildlife interview question)

DL: *laughs* I like it, nice. Um, I guess a coyote because a coyote is very adaptable and they, you know, are omnivores, they can eat anything. They can eat plants, no matter where they are, they can survive and, yeah, I just like them!

Dan Lynch officially started his retirement on August 6th – Congratulations Dan!

Interviewer’s note: Getting to know Dan over the last year or so has definitely been an interesting ride. I have learned SO much about wildlife, trapping, hunting, how to teach educational programs, and most of all, how to have fun at work. Dan is a wealth of information for all things wildlife, and he is always willing to create a challenge or help out with a program just so I can understand the subject matter better. Not only has Dan been a great teacher and mentor, professionally, but he is also a great friend. He is always willing to lend a hand to anyone in need and is truly respected by those around him. Dan’s witty sarcasm and passion and commitment to wildlife, conservation, and teaching will be greatly missed within the Pennsylvania Game Commission’s ranks.



Photo by William Friggle



Editor's note: a HUGE thank you to all who offered their photographs for this newsletter. There were many submissions and far too little space!



Dawn Rise Ekdahl

Although the Kittatinny Ridge to the north gets its rightful attention in the fall for its vital corridor filled with migrating raptors, many others do not always follow the ridge the whole way south, especially for those individuals finding themselves already at places like Middle Creek. Abundant small mammal populations are no doubt a good reason to stop for fast food.

Photo by Dawn Rise Ekdahl

As goldenrods (in the *Solidago* genus) begin to bloom, it thresholds in fall and serves as a late food source for many insect species. The American goldfinch is particularly fond of goldenrod seeds. Luckily, goldenrods are common at Middle Creek due to their, sometimes aggressive, spreading rhizomatic root systems. Over 90 species are native to North America!

Photo by Bonita Palm



In late summer, autumn can be seen sneaking in by watching the leaves of the black walnut and black gum trees begin to fall and lay on the roads and trails around Middle Creek. Then, more and more species begin to follow suit along with migrating species passing through. At last, nature puts on one last big party of color before settling into the cold and grey of winter.

Photo by Warren De Temple

Middle Creek's Shared Spaces

If you frequent Middle Creek often enough, and throughout the year, you probably noticed that the 6,254 acres of land is shared by multiple recreational opportunities. Hunting, fishing, hiking, wildlife viewing, photography, and cycling are all popular activities of visitors to Middle Creek. While the majority of visitors participate in activities that do not involve hunting, the history of why Middle Creek was created tells a different story.

Canada geese populations seem to be prevalent today. However, hunters did not always have the opportunities they have today to harvest these now common birds. Middle Creek's creation centered around providing a hunting opportunity for much of Pennsylvania's population in the southeast, solely for Canada geese. The purchase of land, creation of wildlife habitat, and continued management in perpetuity were all in the name of this well-known waterfowl species. While hunters were able to hunt at State Game Lands 46 (the same Game Lands system that Middle Creek is part of) since the 1920's, permitted goose hunting did not start until the 1974, after much of the non-forested valley was purchased and wetland habitat was created. These same permitted goose hunts continue to take place today.

But what does "permitted hunts" even mean? In a nutshell, you need an additional permit besides your regular hunting license, to hunt the otherwise closed areas at Middle Creek. The permits are limited, and hunters need to apply through a random drawing process to be chosen to hunt. Middle Creek's goose hunting opportunities are not the only permitted hunts offered, however. Middle Creek also offers a permitted dove hunt, an archery and flintlock deer hunt, as well as two adult mentored hunting opportunities for archery deer and squirrel hunting.

The hunting opportunities at Middle Creek are offered throughout five months out of the year (September – January). The permitted hunts are such a core aspect of Middle Creek's purpose because they primarily relate back to the funding sources for the Pennsylvania Game Commission (PGC), the state wildlife agency that runs Middle Creek. The Game Commission is not part of regular tax revenue like many departments of the state government. The agency relies heavily on hunter and trapper license sales to continue their mission, managing wild birds and wild mammals for current and future generations, while promoting hunting and trapping. However, the construction of Middle Creek was also funded by Land and Water Conservation Act monies which requires the property to provide non-consumptive (non-hunting) recreational activities including limited boat access, picnic areas, hiking trails, and wildlife viewing opportunities.

Regardless of the recreational opportunities available to visitors, the Pennsylvania Game Commission, and specifically Middle Creek, try to make decisions with a wildlife first mentality. Our habitat management, which includes draw-downs on our water structures and timber sales, all relate back to benefiting the most species we can on the limited acreage we have. Other examples include lake access being limited and closed from September to May to help with winter roosting and breeding waterfowl.

Want to learn more about the permitted hunts at Middle Creek? Check out the permitted hunt website [here](#).



National Hunting and Fishing Day
September 26th, 11am-5pm
Middle Creek Visitor Center

The banner features a yellow background with black text and silhouettes. On the left is a silhouette of a deer with large antlers. On the right is a silhouette of a fish, likely a trout or salmon, jumping out of the water.

Contact us! Have a question or comment about Middle Creek Wildlife Management Area? We would love to hear from you! Please contact us at middlecreek@pa.gov.