

Fall 2014

FREDERICK MUNICIPAL WATERSHED
MANAGEMENT UPDATE

Frederick Municipal Watershed

The Frederick Municipal Watershed is a 7,022 acre property owned by the City of Frederick. The property is located on the east side of Catoctin Mountain, 6 miles northwest of the City of Frederick. It is managed as a cooperative wildlife management area with MD DNR—Wildlife. Forest management activities are under the direction of the MD DNR—Forest Service.

Forest Management

Happy Fall! This time of year brings many beautiful changes to the forest.

The variable retention harvest mentioned in the spring newsletter was completed in mid-June. Water bars were installed on skid trails (where necessary) and the landing was mulched and seeded with grasses and perennial forbs. Crush and run limestone was



used on the haul road to avoid rutting and erosion.

The commercial thinning located in stand 8.6 along Gambrell Park Road has been successfully marked and tallied. In this 74 acre stand, undesirable and over-mature trees with low quality and vigor were selected for harvest. High quality, healthy trees that will produce mast, as well as den trees for wildlife, were selected to be reserved. An average of approximately 50 to 60 square feet of residual basal area will remain. Portions of the stand have suffered gypsy moth mortality and many of the mature trees are either dead or dying. The residual basal area in these portions will be lower; however advanced regeneration of desirable species is already pre-

sent in these areas.

An invitation for bid letter, along with a map and prospectus were sent out to potential buyers. After the bidding process and the sale is bought, harvesting can be expected within the next 18 months. When harvesting begins, weekly inspections will occur to make sure loggers are working within proper guidelines for forest harvest operations.

Revenue generated by forest harvest operations is used to support other aspects of managing the watershed property including invasive species control, boundary painting, and other maintenance. All harvest operations are reviewed by a group of natural resource professionals and are conducted according to the forest stewardship plan for the property.

Recreation Management

While mountain biking continued in full swing this summer, so did the city of Frederick with forming the watershed AD-HOC advisory committee. As mentioned in the spring newsletter, a committee was formed consisting of key members of trail user groups, as well as Maryland DNR representatives.

The initial meeting for the committee was held in August where everyone was welcomed and introduced. Dr. Christopher Ellis from the University of Maryland expressed interest in involving his students with trail projects on the watershed through the use of site analysis and inventory of existing trail features. DNR representatives, as well as other committee members were also introduced. The committee reviewed the

eight objectives and discussed any necessary changes.

At the second meeting, the objectives were prioritized and sub-committees were formed for the top four objectives. They include: 1) develop a sanctioned trail network system; 2) revise recreation section of current forest stewardship plan; 3) develop a long-term maintenance program; 4) establish law enforcement procedures. A chair was named for each subcommittee.

At the third meeting, students from the University of Maryland were introduced, as they will be conducting research on historical climate change on the Frederick City Watershed. This will include

conducting a citizen survey assessing history, use, and overall perception of the FCW. Also, sub-committee reports were presented for each of the top four objectives, releasing any progress that was made. They also informed the group of any resources that might be needed in order to accomplish the objective.

The next meeting is scheduled in mid-November and meetings will continue monthly throughout the upcoming year.

Trail sabotage items have been located on the watershed yet again. If you come across this, note the location and call Frederick City Police Officer Greg Loftis at 240-674-8941.



Wildlife Management in the Watershed

Contributed by: Donnie Rohrback, MD DNR—Wildlife

Encompassing approximately 7,200 acres of forested habitat within the Catoctin Mountains, the Frederick City Municipal Forest, otherwise known as the Watershed, is a popular destination for sportsmen and women to pursue their favorite game species. The most popular game species hunted within the Watershed is by far the White-Tailed Deer

(*Odocoileus virginianus*). On average, approximately 200 to 300 deer are annually harvested from the area, with the majority of deer taken being antlerless. Another popular wildlife species pursued in the Watershed include the Wild Turkey (*Meleagris gallopavo*), which can be hunted only during the spring season. Other popular species hunted include: Ruffed Grouse, American woodcock, and Fox and Gray Squirrels. A variety of furbearing mammals can also be found throughout the property including raccoons, beaver, mink, red and gray fox, opossum, and striped skunks. In addition to these wildlife species, there is a relatively new furbearer roaming the woods of the Frederick City Watershed, the coyote (*Canis latrans*). This animal migrated from the surrounding states of both Pennsylvania and Virginia and is now a permanent resident throughout Maryland. Many of these animals are hunted or trapped on the Watershed, with some pursued at night during the proper season. A permit is required to be on the Watershed after dark. Another fairly new animal to become part of the Watershed scene is the American black bear (*Ursus americanus*). This large animal is now quite common and can be observed within the area on a fairly regular basis. If you encounter a bear while enjoying the area, it is best to do so from a safe distance and do not disturb their young.

In the late 1970's, the Department of Natural Resources Wildlife Service approached the City of Frederick about developing a Wildlife Management Agreement between both parties. This agreement would give the Wildlife Service the ability to manage the property for wildlife and public hunting while allowing the City to retain ownership of the property.



Since that first agreement went into effect, the Wildlife Service has improved the wildlife habitat on the property. One of the first accomplishments was the installation of metal pole gates at the entrances to the many of the old fire roads scattered throughout the property. Not only did this restrict unauthorized access, but old abandoned forest roads were allowed to revert back into a grass cover to provide important bugging areas for young turkey and grouse poults. Other wildlife management practices accomplished on the property include the development of small wildlife openings. These small openings are scattered throughout the Watershed and are usually about an acre in size. These areas are maintained in a native grass/forbs structure which provides not only bugging areas for young turkey and grouse poults, but also provides succulent browse for young deer and other wildlife. Several of these wildlife openings are periodically planted in an agriculture crop such as a clover/oats mixture, or perhaps sown in chufa or rape seed. Both are enjoyed by deer and turkeys and a variety of other wildlife species.

Not only does the Wildlife Service enhance wildlife habitat on the Watershed, but we also conduct and number of surveys in the Watershed. One important survey conducted on the Watershed is our annual mast survey. This survey tries to assess the amount of hard and soft mast producing trees, shrubs, and herbaceous plants. Oak species are the most prolific mast producing plants in the Watershed and are the major focus of the mast survey. However, other mast producing plants are also considered when trying to quantify the abundance of both hard and soft mast. Grapes, blackberries, raspberries, black gum seeds, hickory and black walnuts, and spicebush seeds are some of the other mast that is considered in the annual assessment. Years of mast abundance are a windfall for forest game species such as black bears, wild turkeys, white tailed deer, and gray squirrels that depend on annual acorn production as a major food source. Conversely, years of poor mast production may present survival challenges to these same species. In addition to the mast survey, other surveys conducted in the Watershed include an assessment of the black bear population, and also the Alleghany woodrat (*Neotoma magister*), which is an endangered species in Maryland.

There is a diversity of other wildlife species that can be found within the Watershed, including a variety raptors, songbirds, small mammals, reptiles, and amphibians. So whether you're a hunter, fisherman, hiker, nature photographer, or a person who just enjoys watching wildlife, the Frederick Watershed is a wildlife haven for all!



Invasive Species Management

It has been an active summer for invasive species treatment on the Frederick City Watershed in 2014! In early summer there was an effort to control the colony of bamboo mentioned in the spring newsletter via hack and squirt with a solution of chemical herbicide. The hope was that the plant would take the chemical into its roots and kill a clump; however only individual stems were killed and the colony continued to thrive.

In August, the bamboo was cut down and removed by chainsaw (see image below). It is expected that the bamboo will send up more shoots, but at this point it has not. The intent is to weaken the colony of bamboo by continuing to cut down the stalks until it only sends up low foliar vegetation that can be sprayed with herbicide. The site will be continually monitored throughout next spring and summer.

The mahonia mentioned in the spring newsletter has been controlled manually by hand pulling. So far no other plants have appeared on the watershed.

In addition to treating the bamboo and mahonia, approximately 4 acres of mile-a-minute (*Persicaria perfoliata*) have been treated throughout the watershed. The areas treated include invasive species "hotspots" that were previously surveyed and documented. The mile-a-minute was treated with back pack sprayers and a foliar spray solution of 3% herbicide.

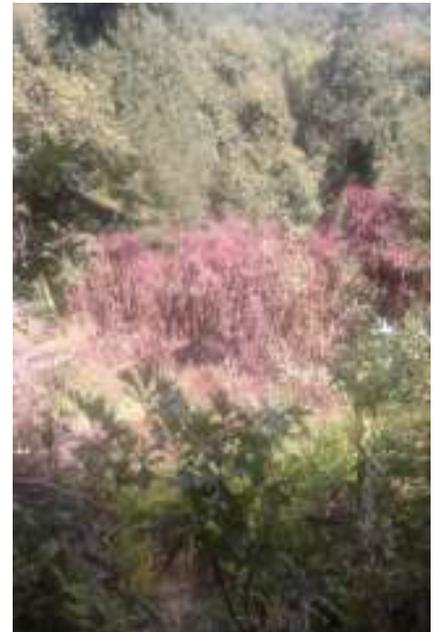
Throughout the summer approximately 1,000 stems of Tree of Heaven (*Ailanthus altissima*), were treated via hack and squirt method. The majority of this treatment also came from the previously mentioned invasive "hotspots" survey.



Another new invasive plant has been discovered on the watershed. Japanese Angelica Tree (*Aralia elata*), which can easily be confused with the native Devil's Walking stick (*Aralia spinosa*), was found just west of Right Hand Fork Road on the northern portion of the watershed. The patch is about one-tenth of an acre in size and is well established, allowing almost no other vegetation to grow in and around the clump. The Angelica tree was treated with a pre-mixed basal bark spray called Pathfinder. The solution was sprayed entirely around the stem and at least a foot in height from the ground up. The majority of the patch was successfully killed and will be monitored in the spring and assessed for further treatment (See image on right).

Angelica tree can be identified by its spiny covered bark and its flowering arrangement in the summer. It usually grows in a solid clump with varying sizes of stems. Its common to see root suckers shooting up around already established stems. This plant can be treated with a foliar treatment, however a basal bark treatment is recommended. For more information on Angelica tree please access the following link: http://www.dnr.state.pa.us/cs/groups/public/documents/document/dcnr_010264.pdf

All treatment areas will be monitored and treated as necessary in the spring and summer of 2015. If you have any questions or find infestations of other invasive plants on the watershed, please report them to the MD DNR Forest Service Watershed Forestry office at 301-791-4010.



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