

SUMMER 2020

Vol. 2, No. 3

FRIENDS OF ROYAL LAKE

Newsletter



Summertime....

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FAIRFAX COUNTY PARKS RE-OPEN BUT....

We continue to live with a pandemic that has claimed more than 135,000 lives and, according to most health officials is not about to go anywhere. We must stay vigilant about following guidelines that help control the spread of Covid19. The park trails are busier than they ever have been. For most of us, the unfamiliar behavior of social distancing has become automatic. Most of us “mask up” when going into enclosed spaces. Although not mandatory, it would not hurt to wear a mask when out and about on park trails.

We also depend on walkers and joggers to observe an etiquette not usually demanded in ordinary times. Please stay aware of others on the trail: maintain appropriate distance; walk single file if more than one; give way to the other if at a narrow pass on the trail; avoid blocking the trail with dogs, strollers, or bikes. If we all attend to caring for each other, we will all stay well through the ongoing crisis.



SHANES CREEK RESTORATION...TREES

By Meghan Fellows

Over 20 years ago Fairfax County recognized degradation of Fairfax County streams consistent with what has now been diagnosed as “urban stream syndrome.” Fairfax County committed to a program of restoration and rehabilitation to prevent further degradation and improve stream corridor health. For more information visit:

<http://www.fairfaxcounty.gov/publicworks/stormwater/pohick-creek-watershed>

One of the degrading conditions specific to Shanes Creek is the loss of trees in the forest along the creek and is the topic of this first of two articles about the restoration of Shanes Creek.

A “normal” healthy forest has a variety of trees of different species, sizes and ages. In Fairfax County, nearly all trees were cut down during the Civil War, making the oldest trees in the county only about 155 years old. In the 1950’s, as we transitioned out of an agrarian society into suburbia, forests began to re-grow in Fairfax County. Our oldest trees were preserved on “unbuildable” lands. These unbuildable lands, were--with great forethought!--made into stream valley parks: urban green corridors that have provided a tremendous ecological and aesthetic benefit to the county.

At the same time, white tailed deer adapted very well to this new urban forest. The deer started eating a lot of little trees. With an overpopulation of deer, fewer small trees were able to make it through to adulthood. Deer also preferentially ate some species, making it harder for oak trees, especially, to get established. In addition, the expansion of suburbia brought with it a demand for easy to grow/care for plants that have become non-native plant pests invading our forests. These plants make it difficult for small trees to survive the deer. (See article on Invasives, page 3.)

Another factor that has knocked our forests back include the removal of natural population controls, specifically fire. A healthy eastern temperate deciduous forest includes oak trees, hickory trees and the occasional chestnut. Red maples and tulip trees currently dominate new growth forests because, without fire, there is little to control their dominance. In an ecological “vicious cycle”, the middle-aged trees that aren’t that diverse are now falling into the creek that is getting too wide! Consequently, we have fewer, smaller trees of even more limited variety.

The Shanes Creek restoration project includes planting new trees of diverse species (with deer protection) to help bring back the natural forest and protect, in the long term, the natural resource that is Shanes Creek.

(Part 2 of the article on the restoration of Shanes Creek will appear in the winter issue of the newsletter.)



WHAT ARE INVASIVE PLANTS AND HOW DID THEY GET HERE???

By Mary Ann Boyer, Suzanne Doherty, and Greg Sykes

Invasive, non-native species of plants threaten the ecosystem of the parks, woodlands, and other natural areas throughout the region. Invasive Management Area (IMA) site leaders, whose voluntary work is through permits issued by the Fairfax County Park Authority help control, if not eradicate, the numerous species that have invaded the Royal Lake Park system. Royal Lake has six site leaders -- MaryAnn Boyer, Lynn Cline, Suzanne Doherty, Sarah Francia, Greg Sykes, Suzie Xu—who, either individually or leading volunteer groups, spend many hours on the invasive management project.

People walking the trails often stop to wonder what we are doing pulling up vegetation in the woods. Some have specific questions. “What’s an invasive plant?” “It’s green isn’t it ...why is it a problem?” “So...which plants are invasive?”

In a nutshell, an invasive plant is a non-native that has few natural controls and is aggressive in propagating itself in our environment. An invasive plant can quickly overwhelm a native species upon which our birds, insects, and other animals depend.



IMA work group tackles garlic mustard

The list of invasive plants is lengthy. Many invaded natural areas from the gardens that folks planted near the woodlands. English ivy, for example, originally arrived in this country with early settlers who planted it as a reminder of home. Today, flats of English ivy (*Hedera helix*) are still sold in garden centers as a ground cover that soon escapes homeowners’ yards, blankets woodland ground, and makes a bee-line for trees. The ivy (pictured on this background) often kills the trees it envelopes. For more information about English Ivy, see http://www.grsykes.com/pdf/eco-article/97_2020-03.pdf

INVASIVES, Cont'd

Japanese honeysuckle (*Lonicera japonica*) is another invasive plant introduced as an ornamental vine in suburban gardens because of its pleasantly scented blooms. It also doesn't respect property boundaries and snakes across the woodland floor competing against native plants for space, water, nutrients, and sunlight. It climbs trees; since the tree trunk is unable to expand and grow where the Japanese honeysuckle wraps around it, the vine creates deep grooves in the trunk. These grooves weaken the tree and potentially brings it to an early death.



Another highly invasive ornamental vine is porcelain berry (*Ampelopsis brevipedunculata*). It is sometimes confused with native wild grape due to a similar leaf structure growing out of a vine. In its mad run to take over the world, porcelain berry covers surrounding shrubs and trees in a thick mat that blocks out sunlight to whatever is beneath it. The vine produces berries that are dispersed by birds to continue its spread throughout the woods.



To some people, garlic mustard (*Allaria petiolata*) is a wild edible that, before it flowers, can be used to make a pesto sauce (although it contains traces of cyanide)! To others, garlic mustard is an obnoxious weed that produces a prolific amount of seeds dispersed by water motion and foot traffic to invade woodlands and displace native ground vegetation. Garlic mustard also has allelopathic properties, meaning that it emits toxins into the soil that stunts growth in other plants.



MORE FUN IN THE PARK.....POKEMON GO

By Janet O'Lare

In a previous newsletter, an article about Geocaching described a treasure hunt-like activity a person might do individually or with others in the park using an I-phone to find actual, tangible items. Pokémon Go is another game that you can play using your phone that encourages walking and searching, in this case, for **virtual** items. There are many facets to the game with loads of information about it available over the internet. However, this article focuses on playing the game in the parks surrounding Royal Lake.

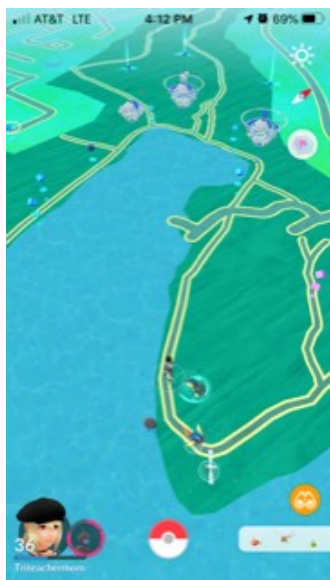
Pokémon, the card game, has existed for decades but Pokémon Go has only been around since July 2016. The game is an 'Augmented Reality' (AR) mobile game developed and published by Niantic in collaboration with the Pokémon Company for iOS and Android devices. 'Augmented Reality' is a technology that superimposes a computer-generated image on a user's view of the real world. This provides a composite view of the real world and a fantasy figure which is amazing the first time you experience it. (See screenshot on right.)



Playing Pokeman Go:

Step one: download the free app. (There are "in-app purchases" available but not needed to play). Once you establish your game account, create and customize your own avatar which is displayed on a map based on your geographical location much like a navigation app uses your location. Features on the map include 'Pokestops' and 'Pokémon Gyms' placed along the lake and parkland trails.

The map will also change with the weather and the time of day. Pokestops and Pokemon Gyms are typically located at points of interest, such as the park entrance, basketball courts, and the play-grounds. Currently there are 20 Pokestops and 7 Pokemon gyms in and around the park with more beyond the boundaries of the parks.



Screenshots of lake and trail map (left); with Avatar (right)

Step two: The main point of the game is to "catch" Pokémon, the amazingly creative 'pocket monsters', the most famous being Pikachu. As you walk within your real-world surroundings, your avatar will move within the game's map and Pokemon will appear on the map as you walk. To catch a Pokemon, tap on the image of the Pokemon which will take you to another screen. Here you can choose AR which makes it look like the Pokemon is in front of you or turn off AR and you will see a generic screen.

POKEMON, Cont'd

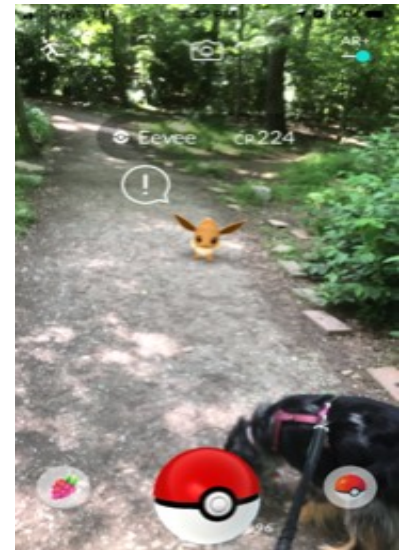
POKEMON, Cont'd



A Pokeball will appear at the bottom of your screen, using your finger, flick the ball at the Pokemon, hitting it, which will capture it (but not always, sometimes they get away!) The Pokemon will then be added to your Pokedex.

Screenshots of a "Pokestop" (left) and "catching" Pokemon (right)

There are multiple objectives within the game among which is to obtain experience points (XP) in order to level up. There are numerous ways to gain XP including visiting a Pokéstop or Pokemon Gym, catching Pokémon, and evolving and/or powering up Pokemon, and battling other player's Pokemon at Pokemon Gyms.



SOCIAL DISTANCING: Pokémon Go relies heavily on people going out into public places. While it is a game that can be a solitary endeavor, much of the game play involves interactions with others. In an activity called a 'raid battle', for example, players join forces to take down a higher-levelled Pokémon. The battles range in difficulty from 1-5 with 5 being the most difficult. Since this normally relies on people being in proximity to the gym and, hence, each other, the game makers increased the distance players could be away from the gym to interact with it. They even created a remote raid pass so that, if you can see the gym on your map, you can join the battle.

The game involves strategy, problem solving and cooperation with other players. It also involves a bit of stamina to do all that walking. You can meet players of all ages, all sorts of backgrounds, interests, and ethnicities. Pokémon Go is another engaging and entertaining way to spend time outdoors and enjoy our Royal Lake Parks.



FORL back at it – soon! By Sarah Lennon

FORL volunteers have taken a hiatus since the beginning of the year, as would be expected with the pandemic, but we are cautiously optimistic that we will **soon** be able to resume workdays and clean-ups, in partnership with the KPW Civic Association Parks & Lake Committee. The Fairfax County Park Authority (FCPA) has notified all Fairfax County Park Volunteer Team (PVT) leaders that workdays are no longer limited to 10 or less. We have a green light to proceed but we have a few additional guidelines to keep everyone safe.

To protect all our dedicated volunteers stringent health and safety requirements are in-line with the CDC and State guidelines. Each volunteer must sign a health/safety acknowledgment form prior to participation. Physical distancing and masks continue to be strongly encouraged. Sign-in sheets will be managed by one FORL volunteer, rather than having each individual handle the pen and papers. We will not provide refreshments, but hand sanitizer will be plentiful!

We are reviewing our trail work spreadsheets and checking with FCPA about proposed repair projects around the lake. We may utilize Sign-Up Genius to manage registration and participation in advance. Stay tuned and follow us on Facebook to get the latest and greatest information! If you have any ideas, suggestions, or want to get more involved, please email me at sarahgjennon@gmail.com.

INVASIVES, Cont'd

Several species of shrubs also threaten our parks' ecosystems. Multiflora rose (*Rosa multiflora*) is a rambling shrub that was widely used for erosion control programs and, because of its heavily thorned branches, as a natural barrier to roaming farm animals. It escaped cultivation and spread into public lands. With its multiple long-thorned stems, multiflora rose is an especially difficult plant to weed out of our parks. Just ask anyone who has spent an afternoon working with the Invasive Management Team!



These are just five of the most common invasive species in the Royal Lake Park system. Most have "jumped the fence" from our own neighborhood gardens. Homeowners who have any of these plants established on their properties can help prevent that jump by, for example,



making sure a ground cover like English ivy does not climb into trees and to keep the edges trimmed to within the property perimeter. Pruning off the purple-blue berries of the Porcelain berry also helps prevent the spread of this invasive. Homeowners interested in eliminating invasive plants from their properties might consider more eco-friendly alternatives. (See box.)

GOOD NEWS! A stand of milkweed....



...for next spring's Monarch butterflies!

Virginia Native Alternatives for:

English Ivy:

Virginia Creeper (*Parthenocissus quinquelolia*)
Wild Ginger (*Asarum canadense*)
Creeping Phlox (*Phlox subulata*)

Porcelain Berry:

Crossvine (*Bignonia capreolata*)
Fox Grape (*Vitis labrusca*)

Japanese Honeysuckle:

Trumpet Honeysuckle (*Lonicera sempervirens*)
Carolina Jasmine (*Gelsemium sempervirens*)

Check out www.plantnovanatives.org



Photo by Tom McCook

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Comments? Suggestions? Ideas?

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