

# Friends Connecting to Friends

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## Three Fond Memories of Maryland's Patuxent Wildlife Research Refuge by Jerry Persall

For half a dozen years up until 2005 when wife Mary came to Maryland, I was a volunteer naturalist at Maryland's Patuxent Wildlife Research Refuge. Had so many wonderful memories there that it would take a couple of books to recount them all. If I were forced to choose three, they would be these.

### Osprey Leg Band ID

This is an osprey; a magnificent bird of prey, they used to be called fish hawks. After an absence they returned to nest on one of Patuxent's ponds and it was important to read their leg bands to see if they were from last year's residents or if they had moved in this year from elsewhere in the mid-Atlantic. One of my acquaintances, Holly Obrecht, USFW Wildlife Biologist (now retired in NC), asked me if I could take my astronomical telescope and see if I could read the numbers on the leg bands. So, I went down to the water's edge one afternoon, set up and waited for the osprey to get high enough in the nest so I could see the leg band. When it did, I read just enough of the numbers for them to ID that particular osprey and the mystery was resolved! They were not returnees.



## Annual Calling Frog Survey

They conduct a Calling Frog Survey during the breeding months and Mary joined me for the last year. There are twelve species of frogs living on the refuge and the males all make different sounds to attract the females. Eventually you get to know them all and you drive a government vehicle once a week in the dark on a route with 8-9 stops where you listen carefully for 5 exact minutes and record what you hear on a clipboard data sheet. It's like an enforced meditation by a water source doing science.

But the clear winners for novelty and noise and the first frogs to emerge in February are the tiny Spring Peepers. You will never see them, but their calls are deafening. Imagine it being winter in Maryland with snow and ice around. You park where you know they congregate and as soon as you open the door their noise is deafening. By the thousands they are calling, and you cannot believe the cacophony. Clicking the link below the picture will put you right in the midst of them. The sound bite is about a minute and twenty seconds long and you may want to stop it sooner than you first think!



[https://youtu.be/Sqx7X3b\\_3mY](https://youtu.be/Sqx7X3b_3mY)

## Beaver, *Castor Canadensis*

Having the run of 13,000 acres of government property set aside for actual wildlife research is a privilege. One time I took my spotting scope and did some dusk beaver observations.

One of the stops on the Calling Frog Survey requires you to park and walk past one of the ponds where beaver have lodges. Invariably in the silence, and in the moonlight if there is any that night, a beaver will notice your presence in his area and almost instantly you'll hear the bang slap of a beaver tail on the surface of the water as a warning. If you look quickly enough, you'll see his ripple on the pond surface.



These are just three Patuxent memories. I have hundreds more. It was a very special place in a very special time. We've been living in Colorado for some 15 years now, but I miss Patuxent and so does Mary.

## A Bit of Citizen Science by Ken Lavish



*Autumn Color at Goose Pond*

I feel that I am getting a lot more enjoyment out of volunteering for Nature's Notebook than the amount of work I am putting into it. Beautiful autumn color, a bit of bird watching, healthy hikes, contributing to science, what's not to like? While making my rounds the other day I added the Yellow-billed Cuckoo to my life list. Okay, trying to identify the tiny, obscure flowers of Switchgrass can be maddening. But it's a good maddening!

### What is citizen science?

Scientific research conducted, in whole or in part, by amateur or nonprofessional scientists. The citizen science project I am most involved with at Patuxent is Nature's Notebook.

### What is Nature's Notebook?

Nature's Notebook is a long-term citizen science program made up of a network of people across the United States monitoring plants and animals as the seasons change, i.e. phenology. The data are used by scientists and land managers to perform research and to make better-informed decisions about natural resources. Nature's Notebook is supported by the USA National Phenology Network and the U.S. Geological Survey.

### Why is this important?

Many plants, animals, and other organisms have evolved together. Some of the organisms form beneficial relationships based on the synchronized timing of their phenophases to serve as pollinators, seed dispersers, food providers, etc. The organisms may use different prompts to trigger their respective phenophases. Three common triggers of phenophases are temperature, day length, and rainfall. It is possible that climate change will cause the timing to become out of sync, which may in turn cause some species' populations to decline. Phenological data provide value for understanding the interactions between organisms and their environment and for assessing the impacts of climate change.



*Monarch on New England Aster*

A classic example of phenological mismatch is the European Pied Flycatcher, oaks, and the caterpillars which feed on the emerging oak leaves. The bird migrates from western Africa to breeding grounds in Europe. Historically, the flycatcher has relied on the emergence of moth caterpillars, which appear each spring to feed on young oak leaves. Increasing temperatures tend to be the primary trigger for Oak leafing and caterpillar emergence. Whereas, the springtime increase in photo period (increase in daylight) is the primary trigger to migrate for the European Pied Flycatcher. Since photo period changes are unvarying, Flycatchers are tending to arrive later than the peak caterpillar season, thereby missing out on an important food source.

### What does a Nature's Notebook volunteer do?



*Ken Checking Mountain Laurel*

Volunteers monitor and report on specified phenophases of several plants over their growing seasons. Some of the phenophases we look for are young leaves, flowers or flower buds, and fruiting.

### Big plans for the future:

The COVID-19 crisis put a kibosh on an ambitious effort to: 1) Increase the number of plant species monitored, 2) Plan, design and establish a phenology walk at Patuxent, 3) Develop visitor engagement activities to familiarize our visitors with phenology, and 4) Develop a Citizen Science/Phenology display for use in the visitor centers and for outreach.

When Patuxent reopened to outdoor volunteering we were able to begin monitoring the larger sample of species. We do plan to resume efforts to complete the enhancements to the project when we can again meet as a group.

Please contact Ken at [kalavish@hotmail.com](mailto:kalavish@hotmail.com) to learn more about Patuxent's Nature's Notebook program or to help out.

## Update on the Gardens at South Tract by Sue Priftis

The pandemic certainly disrupted just about every aspect of our lives, including gardening at South Tract. Here's an update on how the South Tract gardens fared during the spring and summer, and the work currently underway.

### Garden #1: South Tract Pollinator Garden

We were all a bit apprehensive about the condition of the South Tract pollinator garden after months of neglect during the spring. In early March, we had started getting the garden in shape for the warm months. Work on clearing and mulching the pathways was well underway, and we were doing some much-needed weeding after the winter hiatus. And then, right as the spring was beginning, the pandemic broke and we were unable to tend to the plants.

Fortunately, the Refuge grounds remained open, so from time to time we were able to look at how things were faring. And it was kind of amazing! Of course, the weeds and the grasses had run rampant. One weed that we battle every year shared a good-sized portion of the garden with the common milkweed and grew to nearly six feet instead of six inches as we'd seen in the past. And the common milkweed completely blocked the path on one side of the garden. But aside from the messiness, much of the garden was actually thriving. Flowers that made a rather tepid appearance in the past were flourishing. Plants that had been sort of holding their own for the last few years took off. And new flowers burst on the scene.



For example, in June, lovely white and lavender penstemon covered a large area of the garden and started smaller colonies in other areas. Although golden ragwort largely disappeared from its spot near the backdoor of the Visitor Center, it grew profusely in the Visitor Center garden. A patch of light purple monarda fistula (wild bergamot) appeared, and monarda punctata (spotted bee-balm) re-appeared. Trumpet honeysuckle vines planted along the border fence bloomed. Later in the summer, the bright yellow-gold of the brown-eyed Susans and the deep-purple blue of mistflowers made a striking contrast throughout much of the garden. And recently, a large cluster of pinkish-purple obedient plant emerged in the middle of the mountain mint, which also extended its already-considerable presence throughout the garden. The bees, wasps and butterflies were pretty happy!



### Garden #2: Visitor Center Garden

Since outdoor volunteer work was permitted in July, we've put some effort into pulling weeds and getting pathways into shape. But much of our attention in recent weeks has been devoted to laying the groundwork for the new garden right next to the Visitor Center. Through the efforts of Patuxent staff and volunteers and volunteers from Ft. Meade, trees, shrubs and grasses are being removed from that area in order to plant native shrubs like buttonbush, viburnum, Virginia sweetspire, and summersweet. Ferns, grasses and flowers will be planted as well. A path will allow visitors and gardeners to get close to the plants. The goal is to create a native plants garden that is more manicured and formal for the front entrance to the Visitor Center.



### Garden #2½: Wolf Sculpture Garden



The small patio garden that showcases the wolf sculpture has also received some gardening attention. The tall common boneset plants have been removed. Native grasses, which should grow 2 to 4 feet tall, were added to the brown-eyed Susans and lyre-leaf sage already growing there. We left space at the front of the garden so children can get close to the wolves.