## Nature Notes

## By Marjorie Richman

## Only in Winter

After the excitement of spring, and the lazy good times of summer, plants begin to get ready in the fall for the hard times to come in winter. We think of winter as being a time of dormancy, when plants hunker down and wait for better weather. That's true for most, but there are exceptions. Some flowers only bloom in winter, others are pretty spectacular in their dormant state, and with still others signs of the last growing season persist through the winter waiting for the return of spring. After all, it's a good survival strategy to get an early start on the growing season while there is little competition for sunshine and nutrients. True the weather might be a bit unpleasant, but it might be worth it.

Among the flowers that bloom in winter in our area are snowdrops, *Galanthis nivalis*. Snowdrops are pure white flowers that grow in clumps. They can be

seen sometimes as early as February, regardless of how low the temperature might be or whether there is snow on the ground. Snowdrops were brought to our country by English setters. In England there is a long history and folklore related to snowdrops. The flowers are considered a symbol of purity because of their color as well as a welcome, long awaited sign that the worst of winter is over.

The genus name, galanthus, is derived from two Greek words that together mean "milk flower." Nivalis is derived

from a Latin word that means "resembling snow." In other words, a milk white flower of the snow. It's a lovely name for a beautiful flower.

Another plant that blooms in winter is skunk cabbage. They are not as pretty as snowdrops, but they can do something snowdrops can't: skunk cabbage can make its own heat. Skunk cabbage is a member of a small community of plants that are able to regulate their own temperature though a process called thermogenesis.

How exactly thermogenetic plants accomplish this is not well understood, but the best explanation has to do with the process of breaking down starch into sugar. Over time the skunk cabbage stores large amounts of starch in its roots. As the flower grows and emerges above ground, it absorbs oxy-

gen that breaks down the starch and produces sugar. This process generates heat that can exceed the temperature of the air by as much as 30 degrees. When the weather improves, the generation of heat stops.

Skunk cabbages announce their presence in two ways: by their odor and by the ring of melted snow or ice surrounding the flower. As the flower emerges it releases enough heat to melt frozen ground. As for the odor, we might not like it but it is perfume to certain types of pollinators, such as flies and other insects that find carrion tasty. Seeking warmth, pollinators settle on the skunk cabbage flowers. As they fly from flower to flower, pollen is spread among the plants. The warmth and the odor attract the first insects of spring, giving



Above – beech tree bud Below (l-r) – sycamore tree seeds, vultures and snowdrops All photos by Marjorie Richman





Along the Towpath, December 2020

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the skunk cabbage an early start in the competition for pollinators. Skunk cabbage can be found in wet, marshy areas as early as February.

Did you ever wonder about the round, brown objects that are common along the towpath from late fall through the winter? They are the seed heads of sycamore trees, trees that are abundant along the Potomac River. These persist during the winter, either on tree branches or on the ground. Over time the seed heads desiccate and release seeds. Sycamore trees are easily recognized by their bark. The lower bark is the typical brown color, but higher up on the tree the bark turns white. The color difference occurs because sycamore trees have very rigid bark. This prevents a tree from being able to accommodate new growth in a flexible manner. As a result, the bark flakes off as the tree grows, revealing the distinctive white color on the upper branches.

The beech tree is another common tree in our area. Its winter bud is very distinctive, especially since it is one of the few buds that may appear in the winter and continue through the season. The slender form is hard to miss. Inside the bud is a curled up leaf waiting for better weather to unfurl and bloom. Finally, there is one more aspect to winter, the barren trees give us views of wildlife that we might not see at other times of the year. It's a particularly good time to see birds.

There are two reliable places to look for eagles along the towpath: one at Conn Island near Great Falls and another between Point of Rocks and Nolands Ferry. Both have nests that have been used for several years. Nest building (or repairing) begins sometime in November. By late January through early February eagles in our area complete the mating cycle and lay eggs. From the time the eggs are laid to the time they hatch, the adults take turns sitting on the nest. The incubation period is about 35 days. February and March are good months to see one eagle in the nest and perhaps the other sitting on the branch of a nearby tree. You may also see the adults flying back and forth with food for hungry chicks.

Not so spectacular as eagles, but equally impressive in size, are the vultures that are commonly seen along the towpath. These birds seem to be completely accustomed to people. In winter I've seen them walking along the towpath, resting against a tree after a meal or just sitting in a tree. With few people walking along the towpath, you never know what you will see.

Four Locks (Continued from page 21)



To the west of the Denton Jacques warehouse, after fighting through the thorns and weeds, you can find the foundation remains of the Flory House and garage built into the river-facing hill.



Starliper Road, where one of two modern communities were planned just south of the Four Locks parking area. This was a never-realized land development project.



A surface artifact, a shovel, by the Flory house remains. You have to wonder what this shovel did; who used it? How do you explain why it was abandoned. A mystery we will never solve.



The insidious multi-flora rose, bane of all wanderers Lock along the C&O Canal.



Locks 49 and 50.



The canal prism above Lock 50.