

The Newsletter of the Friends of Mt. Agamenticus

Winter 2025

Corvid, corvid - what is a corvid?

If you hear “Caw, Caw, Caw” and see a group (flock) of black birds, they are most likely crows. If you hear “Caw-rk, Caw-rk” and see one or three or at most four, they are most likely Ravens. There is also the Fish Crow, but since I have never knowingly seen one, I’ll wait a bit on that. Crows (*Corvus brachyrhynchos*), ravens (*Corvus corax*) and the Fish Crow (*Corvus ossifragus*) are each all black, look-alike birds, until you know better, and they are all corvids and residents of Maine.

There is also a blue member of the corvids that we all know well, the Blue Jay, as well as the lesser known/rarer in Maine Grey or Canada Jay. I have only seen Grey Jays in Canada, but I am more of a passive rather than active bird watcher so just may not have been out and about enough.

So, just what is a corvid? With our electronic devices close at hand, we are able to find many and perhaps increasingly complex, definitions of corvids. I chose just one from Britannica, but could easily have gotten distracted following the various other links from definition to definition:

“Corvidae, songbird family, of the order Passeriformes, that includes crows, jays and magpies; over 120 corvid species occur throughout the world; most are nonmigratory. Corvids are strongly built, stout-billed birds, 23–71 cm (9–28 inches) long, some being the largest passerines.”

I find it amusing to think of them as “song birds” as they have many vocalizations, but who am I to judge whether it is a song or not? Passeriform/passerine may be a more understandable category in taxonomy (meaning the classification of something, especially organisms) as it refers to perching birds that have four toes, three on the front of the foot and one at the rear. This is so that when they grasp a branch or perch and lower themselves onto it, the toes lock around the perch so they can sleep without falling off or having to keep muscles contracted.

All corvids are considered to be among the most intelligent of the birds; they are omnivorous opportunists and therefore very adaptable to whatever environment they find themselves in. If you found any of this short article



to be of interest, I encourage you to spend some time just searching the web to see where it leads and what you can learn. Here’s a question to start your search, “How can I tell a raven from a crow when it is flying overhead?” and another, since I said I’d get back to the Fish Crow, “How can I identify a Fish Crow from its voice (song)?”

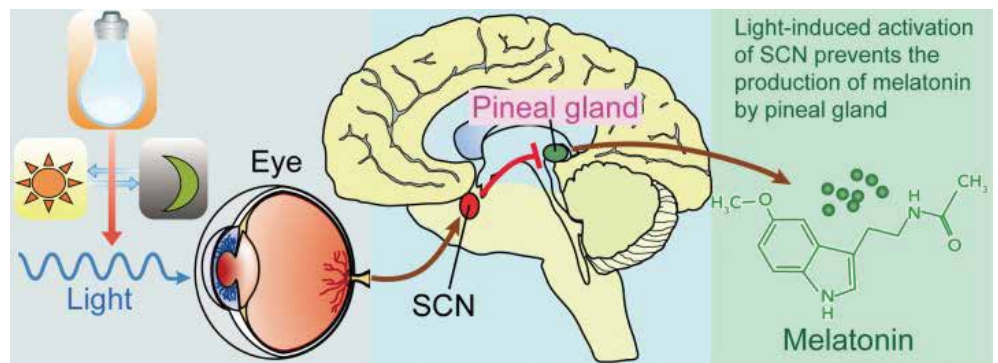
If you would like a little more direction, I encourage you to read Bernd Heinrich; he is a favorite nature writer of mine and a retired professor who lives in Maine and writes well about many topics, many of which can be found at this link: <https://www.thenaturalistsnotebook.com/books-by-bernd> – the Mind of the Raven, Ravens in Winter and Winter World would make wonderful starting places.

My starting point for writing this article was <https://birdwatchinghq.com/corvids-in-maine/> and you could certainly start there, then just following links to your areas of interest. If you search “bird” in Wikipedia you will go down the most wonderful “rabbit hole” (now, there’s a mixed metaphor) of nomenclature, taxonomy, etc. Also, a final suggestion - if you use Wikipedia as much as I do, consider a small donation for all the “free” information available. - Mike Modern

Circadian Earthlings

The clock is always ticking – oh, not the one on the church steeple, but inside our bodies and those of most living creatures on Earth. The ineluctable fact that our planet rotates on its axis (an imaginary line that runs through the North and South Poles) every twenty-four-hours* is what controls the incomparable functioning of living organisms on Earth with a “biological clock”. Our innate sense of time – our human internal clock, determines our physical, mental, and behavioral changes over a twenty-four-hour cycle. The workings of this biological clock is also called “circadian rhythm”. Circadian, is a word coined in 1959 by German-born biologist Franz Halberg from the Latin words circa (“about”) and dies (“day”). Nearly every tissue and organ in our bodies have their own specific circadian rhythm tuned into the day/night cycle that influences our immune system, metabolism, cognitive function, reaction to stress, sleep patterns, hormone release, appetite, digestion, and body temperature. Our master internal clock coordinates all the biological clocks in an organism. In animals, plants, even fungi and microorganisms it tells them when to eat, sleep, reproduce, regenerate cells and migrate. We have evolved, and are inextricably tied to, the distinct twenty-four-hour rotation of Planet Earth. Circadian rhythm is crucial for survival of many species in its prediction of the seasonal periods of weather conditions, food availability, or predator activity. It controls the feeding patterns of animals according to core body temperature, brain wave activity, hormone production, cell regeneration, hibernation, and reproduction.

The changing length of day/night and the physiological reaction of living organisms to it (photoperiodism) is vital to plants and animals, and it is the circadian system that measures and interprets this information. In vertebrates, circadian rhythm is controlled by the Suprachiasmatic nucleus (SCN), a cluster of nerve cells located in the anterior part of the hypothalamus in the brain. It is made up of proteins encoded by thousands of genes that switch on and off in a specific order – like pretty amazing clockwork. Our sleep/wake cycles are tied to this mechanism in the production of the hormone melatonin which is fundamentally based upon the amount of natural light the eyes receive. Sunlight to the brain is all-important to the quality of sleep. For those whose circadian rhythm falls out of sync from such things as jet lag, late night shift work, neurological diseases like Alzheimer’s and Parkinson’s, and notoriously, the light from phones, television, and other electronic devices before bedtime, it may be time to reset your internal clock with appropriate “sleep hygiene”.



<https://commons.wikimedia.org/w/index.php?curid=72747105>

Hormonally speaking, adolescents naturally have a delayed daily release of melatonin, making them stay up late and remain sleepy in the morning; still given that, they need eight to ten hours of sleep. In the short-term, sleep loss causes drowsiness, poor coordination, lack of ability to focus and difficulty learning. Long-term sleep loss increases the risk of many, many serious physical and mental health problems from mood disorders to cancer. Most adults need a solid seven to nine hours of sleep each night, so let’s make the most of the lovely, longer winter nights. - Denise Johnson

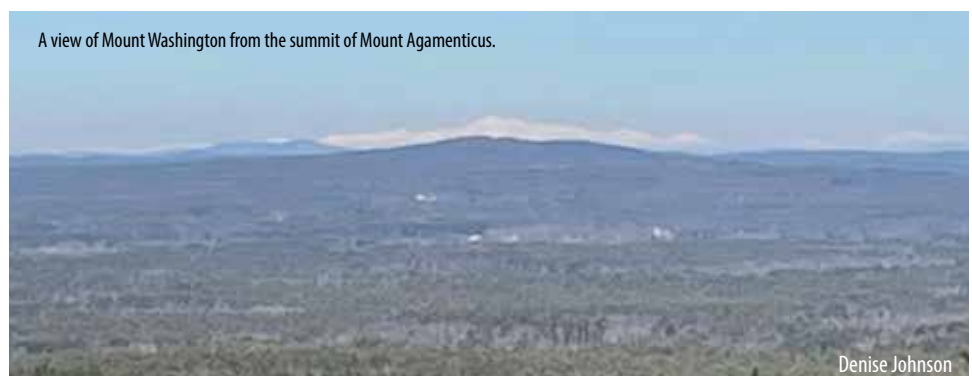
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*The Earth rotates on its axis relative to the Sun every 24.0 hours (mean solar time).

Sleep Hygiene: 7 Tips for a Better Bedtime Routine, <https://health.clevelandclinic.org/sleep-hygiene>

Adolescent changes in the homeostatic and circadian regulation of sleep, <https://pubmed.ncbi.nlm.nih.gov/19546564/>

Short- and long-term health consequences of sleep disruption, <https://pmc.ncbi.nlm.nih.gov/articles/PMC5449130/>



BARRED OWLS



Kaily Rich

Barred owl perched at the summit of Mt A.

Barred owls are large birds with round heads without ear tufts and have mottled brown and white feathers. They are nocturnal but are also more active during the day than other owls. Barred owls are native to the eastern U.S. and are commonly found in mature mixed woodlands with scattered openings and favor areas bordering bodies of water, marshes or meadows. They eat a variety of prey species, but their main food source is mice and other small rodents.

Population data isn't clear, but the numbers seem to be steady or expanding in Maine. Many factors can influence population size to include weather, climate, disease, habitat and food availability among other things.

The Center for Wildlife has admitted 70 barred owls since the beginning of November according to Clinic Coordinator, Abby Schofield. Schofield noted that they usually see an uptick of owl admissions that have been hit by cars in the fall/early winter when young birds disperse from their nesting area. Because they are inexperienced, these owls often head to more open areas to search for an easy meal. Unfortunately, this includes roadways where mice and other animals are attracted to food scraps and other litter. To help prevent owls from being hit, people should keep food and trash out of roadways and be alert while driving, paying attention to their surroundings.

Snowfall on the summit.

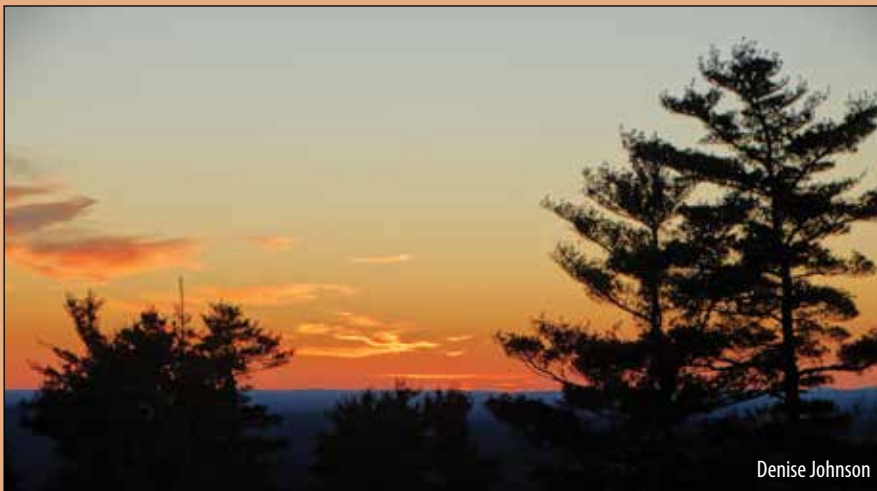


Sunrise and Sunset Times Near the Solstices (*Excerpt*)

Our clocks do not keep Sun time. Time measured by the position of the Sun in the sky is somewhat variable over the course of a year, but our clocks keep a uniform approximation to Sun time with each day exactly 24 hours long. One consequence of this is that sundials usually seem to be wrong; that is, they do not keep clock time. The times of sunrise and sunset, measured by the clock, are also affected by the difference between the two kinds of time. Although the length of daylight is shortest on the winter solstice, around December 21, the dates of earliest sunset and latest sunrise are, somewhat surprisingly, not on this date. Why is that?

The reason can be traced to the fact that the difference between Sun time and clock time is rapidly changing in December and January. The Sun runs slow compared to clock time then, so the times of both sunrise and sunset tend to be a bit late according to the clock, delayed from one day to the next by up to a half minute. Consequently, the time of sunset begins to shift later at an earlier date than we would expect (so that the earliest sunset is in early December), and the time of sunrise doesn't begin to shift earlier until a later date than we would expect (so that the latest sunrise is in early January).

Please visit the U.S. Navy Astronomical Applications Department page for the full article: https://aa.usno.navy.mil/faq/rs_solstices



Denise Johnson

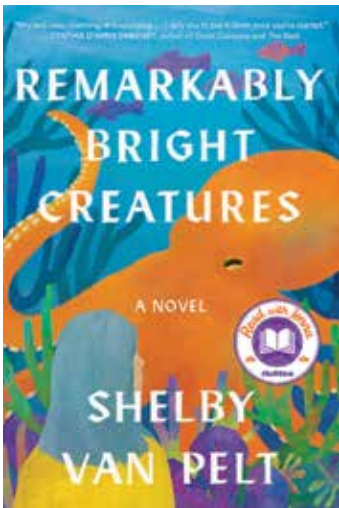
BOOK REVIEW:

Remarkably Bright Creatures

a Novel by Shelby Van Pelt

A favorite book that doesn't snugly fit the usual criteria for Paula's Best New England Nature Books which include primarily:

- Local nature, people or places: No, the story takes place in the Pacific Northwest and involves a Pacific Octopus. Take the adventure!
- Can be enjoyed by both teens and adults and is a memorable, eye opening and life changing story: Maybe, but older teens, twenty-somethings through older adults would most identify with the story.
- New England Author: No, she is from Washington, but the story is inspired by an earlier Sy Montgomery (New Hampshire author), non-fiction piece about a clever Octopus at the New England Aquarium.
- Found at Local Book Store: Check! River Run in Portsmouth, NH.
- Beautiful cover (not essential but part of initial attraction): Check!
- Quick Read: Check! 360 fast moving pages including acknowledgments!



This sweet story is narrated by an octopus named Marcellus in captivity in a Puget Sound, WA aquarium where Tova, the main character, works as a custodian at night. Tova is an older woman who develops a very special bond with the octopus that has mastered escaping from his tank and sneaking into other tanks to feast on sea cucumbers and other more interesting prey than he is normally fed. At great risk to all involved, Tova empathizes with his situation and keeps his secrets. Marcellus the Octopus has observed visitors for so long that he knows a lot more about human nature than anyone knows about sea creatures like him. He knows that he only has a limited life span and truly wants to communicate some important thoughts with Tova.

Tova has some big decisions to make about her life. She is troubled by unsolved mysteries and sadness around how her only son died in a boating accident, her husband passing away, and whether she should move out of her old, high maintenance house which would necessitate leaving her community of friends.

Meanwhile in a parallel universe, e.g., California, a young man has a lot of decisions to make to about his own life, relationships, holding a job, and finding his absent father. His world collides with Tova's as he takes a job at the same aquarium under her tutelage. They form an intergenerational friendship and although not as receptive to communicating with and befriending Marcellus the octopus, he does reluctantly find himself in a caring relationship with him.

Themes of the story are varied. They range from unlikely but powerful friendships, aging, maturing, the importance of community, humans bonding with animals, the ethics of keeping animals in captivity and the meaning of freedom from the perspective of other beings, and freedom from our self-imposed limitations. It has been suggested by some readers that there are more. Marcellus' intriguing observations from behind the glass may tell.

End of Year Program Update

Stewardship: 2024 marked an exciting time at Mount A. The completion of new parking and restroom facilities commanded the need for our largest ever seasonal staff, with an expansive range of duties. For the first time, a rotating team of Park Rangers worked from dawn to dusk seven days a week maintaining trails, protecting natural resources, managing the Summit Park and facilities. Rangers were assigned their own unique trail route and set out to thoughtfully improve long term sustainability. Increased staffing and unusually dry weather combined for a productive field season with substantial accomplishments. Notable projects include new boardwalks on Ring and Cedar trails, rehabilitated stormwater management on the Big A Trail, refinishing the Learning Lodge floors, over 200 native plantings, and invasive species mapping and removal throughout the Three Hill area. The continued success of the Conservation Program would not be possible without the invaluable support of volunteers and passionate staff. Those who dedicate time to care for Mount A have much to be proud of in 2024.

Highlights:

- 1,320 Registered Visitors
- 966 Registered Students with 10 Staff-Led Experiences
- 20 Public Programs
- 4,138+ Visitors to the Learning Lodge

Outreach: Through immersive experiences, the Conservation Program aims to promote responsible use of the area, instill a greater appreciation, love, and respect for the environment and inspire future advocates for protecting our natural resources. Outreach and environmental education efforts are designed to help visitors understand the unique resources located at Mount A and the importance of responsible low-impact recreation as they set out to explore the area. Full-length reports can be read at: <https://agamenticus.org/2024-program-update/>.

