

# The MMGM *SPRING ROCKS!* Bingo Game

The Maine Mineral and Gem Museum is excited to bring you our *Spring Rocks!* Bingo Game. You will have the entire month of May to get a “Bingo” (meaning 5 squares in a row, including diagonally.) If you get a Bingo, you can bring your Bingo Board back to the MMGM when we reopen for a **prize!** If you complete the entire board, you can **pick out your very own prize** from MMGM’s *Big Box of Spectacular Specimens!*

Directions: Find as many items on the board as you can, record the date you observed it, and have a parent or grown-up sign off on it. We encourage you to be creative and use your senses to “observe” these objects. For example, if you *heard* a woodpecker, *smelled* a lilac, *tasted* a wild strawberry, *touched* a piece of quartz, or *saw* the scat or tracks of a coyote, that counts!

Happy Bingoing, everyone!

 Ruby-Throated Hummingbird Date Observed:	 Mizar and Alcor Date Observed:	 Daffodils Date Observed:	 Red Squirrel Date Observed:	 Common Loon Date Observed:
 Spring Peeper Date Observed:	 American Robin Date Observed:	 Coyote Date Observed:	 Quartz Date Observed:	 Balsam Fir Date Observed:
 Sugar Maple Date Observed:	 Eastern Chipmunk Date Observed:	 Nature Meditation Date Observed:	 Wild Turkeys Date Observed:	 Wild Strawberries Date Observed:
 Mica Date Observed:	 Black-Capped Chickadee Date Observed:	 Common Lilac Date Observed:	 Eastern White Pine Date Observed:	 Big Dipper Date Observed:
 Downy Woodpecker Date Observed:	 Lichen Date Observed:	 Granite Date Observed:	 Venus Date Observed:	 Rock Cycle Specimen Date Observed:

Category Key



Bird



Mammal



Astronomy



Mineral



Plant



Amphibian

# Spring Rocks! Bingo Guide

American Robin	The most distinguishing feature of the American Robin is its orange/red belly. It is an omnivore that eats insects and earthworms as well as fruits and berries. You might even be able to spot their nests around your home or in town. <i>Hint: although the American Robin prefers a woodland home, it is very adaptable to suburban yards and parks.</i>
Balsam Fir	The Balsam Fir is the most abundant tree in Maine, frequently found in damp woods, hillsides or thickets. The tree's aromatic, needle-like leaves grow about 1" and are dark green and shiny. Its cones grow up to 2-4", and its bark gets rougher and less smooth with age. <i>Hint: the Balsam Fir is a favorite for Christmas trees, wreaths and potpourri.</i>
Big Dipper	If you look up in the sky just after nightfall, you'll be able to spot the seven major stars that comprise the Big Dipper. The Big Dipper is actually an asterism, meaning a star pattern, not a constellation. It is a part of the constellation Ursa Major, or the Big Bear. It is also circumpolar, meaning it is visible year-round in Maine and the northern United States (whereas other stars are seasonal due to the tilt of Earth's axis.) The Big Dipper was an important part of the Underground Railroad, used by slaves as a navigational tool to stay on track northward. <i>Hint: if you draw an imaginary straight line outward from the two outer stars that make up the Dipper's bowl, you'll find Polaris (the North Star), the 49<sup>th</sup> brightest star in the sky.</i>
Black-Capped Chickadee	The Maine State Bird, the black-capped chickadee, is a year-round resident of Maine and commonly found near bird feeders or wooded areas. The chickadee has a black "cap" and a white "bib" and cheeks. Chickadee calls are language-like in that they communicate information, such as predator alarms, through their calls. The more "dees" you hear, the higher the threat. Interestingly, many birds – not just chickadees - understand chickadee alarm calls. <i>Hint: listen for the Chickadee's signature call – "chicka-dee-dee-dee!"</i>
Common Lilac	The Common Lilac is a perennial, deciduous and dense hedge growing up to 15'. Its leaves are heart-shaped with smooth edges. Its flowers range from white to light and dark purple. <i>Hint: Lilac flowers are beautifully fragrant and typically bloom in the latter weeks of May. If you can't find one, let your nose do the work!</i>
Common Loon	The call of a Common Loon is extremely distinguishable for Mainer! Symbolizing the natural beauty of Maine, the Common Loon is found on freshwater lakes; has a distinctive black and white checker pattern on its wings and back; has red eyes and can grow up to 28 inches long (or 14 pounds.) Unlike other birds, it has solid bones, making it an efficient swimmer and diver but slow on land. <i>Hint: Females start laying their eggs in May. If you're lucky, you can spot the chicks, although you'll probably hear a loon before you see one!</i>
Coyote	Intelligent and adaptable, coyotes are a mix of tan, black and grey; typically weigh 30-35 lbs (rarely exceeding 45 lbs); and have a pointed nose and bushy tail. They typically hunt at night, sometimes in numbers, although they are also known to scavenge food. <i>Hint: coyotes are shy - you're more likely to hear a coyote or see its tracks or scat than spot one.</i>
Daffodils	Daffodils are among the first plants to bloom, showing early signs of spring. The plants emerge as slim green stems jutting upward, then produce bright, trumpet-shaped flowers starting in early April. Daffodil stalks can range from 4"-24", producing 1-12 flowers per stalk. For Maine's Bicentennial celebration this year,

	yellow jonquils (like daffodils, are in the genus <i>Narcissus</i> ) were planted all around the state as a proud symbol of the Women’s Suffrage movement.
Downy Woodpecker	Can you hear it? Listen for the Downy Woodpecker’s short, rhythmic drums as it pecks at a tree. The smallest variety of Maine woodpecker, the Downy Woodpecker does not migrate and is a year-round resident of Maine. It can be found in open woodlands and even in parks and orchards. Although the Downy is similar to its larger counterpart, the Hairy Woodpecker, it is smaller in size (about 6”), has a slower drum, a shorter bill, and black spots on its tail. Males have a red patch on the back of the head. <i>Hint: the Downy Woodpecker is the most likely woodpecker species to visit your backyard feeder!</i>
Eastern Chipmunk	It isn’t just cute; the omnivorous Eastern Chipmunk serves a valuable purpose in forests by dispersing seeds for tree regeneration. Weighing just 2-5 oz, the Eastern Chipmunk is reddish/brown with a white belly, a single stripe down its center back and symmetrical black and white stripes on either side. It builds complex burrow systems underground where it sleeps and stores food. <i>Hint: Chipmunks are most active during early morning and late afternoon.</i>
Eastern White Pine	Can you spot Maine’s Official State Tree? Considered to be the largest conifer in the NE United States, its needles range from 2.5-5” and are soft and flexible, appearing bluish-green and arranged in bundles of five. Its cones can measure up to 8”. Its wood has high economic value and is therefore desirable for loggers, since it is easy to cut and yields long, knot-free boards. <i>Hint: bald eagles, osprey and great blue herons often nest in tall white pines near water.</i>
Granite	Granite is a common igneous rock made of quartz and feldspar, and may include other minerals such as mica, garnet or amphibole. Pegmatite is a special kind of coarse-grained igneous rock, commonly of granitic composition, which can be home to rare and exotic minerals. Granite quarries exist all over Maine and date back to the early 1800s, where granite was mined as a building stone and shipped all over the United States. Be sure to add your granite sample to your collection! <i>Hint: if you come across some granite stairs, look for the drill holes in which feathers and wedges were inserted to slice off the giant slabs.</i>
Lichen	Lichen, commonly mistaken for moss, are unique, plant-like organisms comprised of a symbiosis of fungi, algae and bacteria. They are slow-growing and can live for over a century! They are found in soil, tree bark and even on rocks – sometimes carpeting a whole area of forest. <i>Hint: lichen prefer cool, humid climates.</i>
Mica	As an industrial mineral, mica has a range of applications, and is either ground up and sold by weight or as “books” of mica. It has reflective and lubricating properties, and is resistant to heat and charge, making it a good insulator. Thus, it was frequently used in toasters, electrical insulators, axle grease, and paint. It’s even used in lotions and makeup for its reflective, glittery properties. There are three types of mica found in Maine pegmatites: biotite, lepidolite, and the more common muscovite mica. Be sure to visit MMGM’s <i>Mica Matters</i> exhibit for more information and remember to add your mica specimen to your collection! <i>Hint: you’re most likely to find the silvery muscovite mica in your search.</i>
Mizar and Alcor	Also known as the Horse and Rider, Mizar and Alcor are two stars that make up a point in the Big Dipper and the constellation Ursa Major, or the Big Bear. Because they appear so close together, they are often thought to be one star; however, with a closer look on a dark night, you’ll be able to distinguish Alcor – the dimmer of the two – from Mizar, its brighter counterpart. The ability to differentiate Alcor from Mizar is said to be a test of eyesight, although it is probably more a test of the darkness of your night sky. Although we see Mizar and Alcor as two stars with the

	naked eye, it was actually discovered to be a six-star system in 2009! <i>Hint: find the Big Dipper to locate Mizar, then look closely for its neighbor Alcor!</i>
Nature Meditation	The center square on the board is designed to be a 30-minute meditation in nature. Walking or sitting, use this opportunity to immerse yourself in the outdoors; get some fresh air; and be mindful of the sights, sounds, and smells around you. If you have a favorite spot to meditate, keep track of how that area changes over the season. <i>Remember to be safe when exploring outdoors and always let an adult know where you're going.</i>
Quartz	Quartz is one of the most abundant minerals found on the Earth's surface. It can be colorless but also comes in a variety of colors (such as rose, smoky, amethyst, milky and citrine), depending on factors like what minerals, trace elements and vesicles of gas may be present. It is a significant component of many igneous, metamorphic and sedimentary rocks. It is found in the form of both individual crystals and as crystal aggregates, and is most identifiable by its hardness, vitreous (glass-like) luster, and conchoidal fracture patterns. Don't forget to add your quartz specimen to your collection!
Red Squirrel	You can probably spot these furry, white-bellied, bushy-tailed rodents looking for food near your house or even pestering the birds at your feeder. Red squirrels are territorial and eat a wide variety of food, from seeds, nuts and insects to poisonous mushrooms, eggs and even small animals. Red squirrels spend most of their time gathering and storing food in their dens for winter, while steering clear of the many predators that would hope to make a snack of them! <i>Hint: Red squirrels are diurnal, meaning they are active during the day.</i>
Rock Cycle Specimen	Take some time to find a rock specimen that catches your attention. Sedimentary, igneous, or metamorphic... which rock type is YOURS? Examine your specimen's physical characteristics for clues; such as grain size, color, mineral composition, and hardness of the rock's individual minerals. Be sure to visit MMGM's <i>Plate Tectonics and the Rock Cycle</i> exhibit for more hands-on opportunities to learn about the rock cycle and view specimens under a petrographic microscope. Remember, you must bring in your specimen to show MMGM staff along with your completed Bingo Board to get a prize. <i>Hint: visit <a href="https://geology.com">https://geology.com</a> to help identify your specimen.</i>
Ruby-throated Hummingbird	You should be able to spot some Ruby-throated Hummingbirds around here starting in May. These little birds weigh only 2-6 grams and flap their tiny wings up to 70 times per second. They can even fly backwards! <i>Hint: males, in particular, are very territorial and have a pronounced, iridescent, ruby-colored throat.</i>
Spring Peeper	You'll probably hear a Spring Peeper before you see one! Native to Maine, Spring Peepers are named for their signature high-pitched calls. They are typically found in places with dense plant growth near bodies of water like a pond, swamp, or stream. <i>Hint: Look for the signature "X" that Peepers have on their backs!</i>
Sugar Maple	The Sugar Maple is a deciduous tree (meaning it sheds its leaves in the fall) and is the primary source for maple syrup and maple sugar. Not to be confused with a Red Maple, a Sugar Maple's leaves are smoother and its flowers are green. <i>Hint: look for the maple's samaras (winged seeds), or its "spinners" that twirl like a helicopter when they shed in autumn!</i>
Venus	During the month of May (the first three weeks in particular,) look to the western sky after sunset for a chance to see Venus. It is the third brightest celestial body in the sky, following the Sun and Moon. Due to the tilt of Earth's axis, Venus is plunging closer to the horizon with each passing day into Spring. <i>Hint: while Venus is moving toward the sunset, Mercury will be climbing higher in the sky with each</i>

	<i>passing day. On May 22, 2020, these two planets will appear side by side in the sky, and Mercury will be visible with binoculars.</i>
Wild Strawberries	Wild strawberries are low-growing and produce creeping plants that grow sideways along the soil. Wild strawberries flower from April to June, developing small white petals with yellow stamens in May, and bearing fruit in late June or July. <i>Hint: wild strawberries are smaller than the ones you buy in your grocery store!</i>
Wild Turkey	Wild turkeys are social birds and survive in flocks. Look out for wild turkeys in clearings, fields and forest edges. Males puff themselves into great balls of feathers and fill the air with their loud, distinctive gobbles. Wild turkeys eat nuts, seeds, berries, insects and even small reptiles. <i>Hint: depending on the time of day, a flock of turkeys can be found scouring the ground for food or roosting up in trees.</i>

### Additional Resources to Help You on Your Way!

- 1) Cornell Lab of Ornithology Bird Guide
  - <https://www.allaboutbirds.org/guide>  
Find information on over 600 species of birds, including their calls.
- 2) UMaine Cooperative Extension Local Species Database
  - <https://extension.umaine.edu/signs-of-the-seasons/indicator-species/>  
You can find more information on some of these species on UMaine's website.
- 3) Maine.gov Fish and Wildlife Index
  - <https://www.maine.gov/ifw/fish-wildlife/index.html>  
Find information on native Maine species.
- 4) Mahoosic Land Trust
  - <https://www.mahoosuc.org/news> – MLT's "Bird Notes" for local bird sightings and news
  - <https://www.mahoosuc.org/hikes> -- MLT's list of hikes on conserved land.