

Mulches for the Vegetable Garden

The first of a two-part series, adapted from an article by Diane Relf and Alan McDaniel, Virginia Cooperative Extension Service

Mulching is a practice adaptable to nearly all home gardens. To mulch is simply to cover the soil around plants with a protective material, organic or inorganic.

Using a mulch can help you and your garden in many ways. Mulches reduce weed growth by making conditions unfavorable for germination of weed seeds and by providing a physical barrier for emerging weeds. A good mulch layer can save many hours of laborious weeding. A thick layer of organic mulch material is especially effective in reducing the number of annual weeds in the garden, since they have difficulty penetrating such a layer. Some perennial weeds may also be suppressed in this way if they are small, but often dandelions or other tap-rooted weeds will eventually find their way through the mulch. These are easy to spot, and since the soil stays moist beneath the mulch, they are easy to pull. Rhizomatous grasses will often make their way through organic mulches as well, but often the rhizomes will be on or near the soil surface and will be easy to lift out. Black plastic and thick layers of newspaper are often better mulches for controlling perennial weeds.

Mulches are very useful for maintaining uniform moisture conditions in the garden. Water loss through evaporation is decreased, and soil erosion is decreased as the impact of a heavy rainfall is reduced by the layer of mulch. This allows a slow, steady water infiltration rather than the puddling and subsequent crusting which often occur with a heavy rain. Mulch also reduces splashing of soil onto the fruit, leaving fruits cleaner and helping to prevent the spread of disease.

Soil temperatures are modified by mulches to various degrees. Plastic mulches will warm the soil more quickly in the spring, increasing early plant development. Organic mulches act as insulation, helping keep soil temperatures cooler and, therefore, should be applied later in the season.

Organic mulches add nutrients and humus to the soil as they decompose, improving its tilth and moisture-

holding capacity. Most organic mulches should be applied after plants are well established (4 to 6 inches tall). Cultivate out all weeds before spreading the mulch evenly over the bare soil between the plants. Apply organic mulches when there is reasonably good soil moisture and before the weather turns hot. Infiltration of rain water will be slowed somewhat by a mulch, so it is best not to place the mulch over soil that is dry. Water thoroughly or wait for a good soaking rainfall before applying any mulch.

Inorganic mulches, such as plastic films and paper, are applied prior to planting. Black plastic and similar materials should be spread on land that has been completely prepared for planting and has a high moisture level. Place the mulch over the row to be planted, then bury the edge to prevent it from blowing away. Cut slits for seeding or setting transplants. A few additional slits can be made to allow water to infiltrate.

Purpose, availability, cost, and final appearance of a mulch will be the determining factors in choosing which type to use. An evaluation of the more commonly used mulches follows.

ORGANIC MULCHES

Sawdust - A 2-inch layer of sawdust provides good weed control. If applied around growing plants, add 1/2 pound of actual nitrogen per 10 cubic feet of sawdust to prevent nutrient deficiencies. Fresh sawdust contains a great deal of carbon and very little nitrogen, and its breakdown requires that microorganisms take nitrogen from the soil. A very thin layer of sawdust (1/4 inch) is useful in starting seeds because it helps keep moisture in; again, be sure nutrients are adequate. There is often a problem with crusting of fresh sawdust, with resulting impermeability of rainfall. Sawdust is best used for garden paths and around permanent plantings. Readily available from sawmills, it tends to be inexpensive.

(continued on page 5)

THE BAUER PARK

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Winter Sleuth:
whose track is that in the snow, and how can you tell?
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What IS Letterboxing, and why is it so popular?...pg. 2
Where is Bauer Park's newest letterbox?...pg. 6

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What is Letterboxing?

Letterboxing has been fondly described as “searching for Tupperware in the woods.” This definition comes from Atlas Quest, a website devoted to letterboxing and letterboxers:

Letterboxing, at its most basic, is a like a treasure hunt type of game. Small boxes are hidden in various locations – usually outdoors, though many are planted indoors as well – and the creator of the box will release clues so others can go out and find them later. The box is expected to have a logbook that finders can log into and a unique stamp, usually hand-carved, that the finder can stamp into their own personal logbook as a record of all the letterboxes they’ve found. Most letterboxers have a unique stamp to represent themselves, called a signature stamp; they stamp into the logbooks found inside letterboxes so others who find the letterbox later know they found it.



When did letterboxing begin? This appears on Letterboxing.info:



*According to legend, letterboxing began in southwestern England in 1854 when a Victorian gentleman named James Perrott hid his calling card in a jar in a remote area by Cranmere Pool on the moors of Dartmoor (the setting of Sir Arthur Conan Doyle’s Sherlock Holmes story *The Hound of the Baskervilles*). Perrot was a guide on the moor, and he encouraged his clients to leave their cards in the jar, as well.*

When did letterboxing come to North America? In April 1998, Smithsonian magazine published a story on Dartmoor letterboxing, giving rise to Letterboxing North America. There were some similar programs in place before this time, however, including the Valley Quest program, which continues to be active today. Connecticut has been referred to as “letterboxing heaven” – if you want to letterbox, it’s the place to be! Again from Letterboxing.info:

Many of the earliest letterboxers lived in the Northeast, particularly in Connecticut. As a result, the activity took hold in and around that state, and Connecticut now has the largest number of letterboxes of any state, with nearly 2,000 as of July 2004 (out of 9,000 in the entire U.S.). Given the size of the state, it certainly has the densest concentration of letterboxes in the country, a distinction that is likely to remain for some time.

Why letterbox? It’s an excuse for a hike. It’s something the family can do together. It combines creativity (stamp carving) with exercise! It exercises both the body and the mind (check out some mystery clues!) It’s a fun hobby that doesn’t require expensive equipment – rubber stamp, inkpad, notebook, pen, possibly a compass and/or map, and clothing and footwear appropriate for the weather and terrain you plan to visit. And computer access to get your clues!

Come and find out more! See a list of upcoming Letterboxing classes on the next page.



Bauer Park Gift Cards, available in any amount and redeemable for any educational program at Bauer, are the perfect gift for nature lovers of any age!

AVAILABLE AT THE MADISON BEACH & RECREATION OFFICE. VISIT OR CALL 203-245-5623.

Bauer Park Programs, Winter 2008-2009

This listing of Bauer Educational Program information is also available at <http://www.madisonct.org/bauerpark.html>. Bauer Park is at 257 Copse Road. From exit 61 off of I-95, follow Route 79 north for 1/8 mile. Turn left on Hunter's Trail and follow for about 1 mile to where it ends at Copse Road. Bauer Park is directly ahead of you. The classroom is the smaller white building next to the farmhouse. If you would like to be added to the Bauer Park e-mail announcements list, please include your e-mail address when registering for programs; it will not be shared with any other organization.

FAMILY PROGRAMS

LOCAL OWLS

Sunday, 1/11
3:30-5:30 p.m.

Owls are amazing birds of prey. Indoors, participants will learn about their haunts and habits. Before swallowing their prey, owls separate out what they can't digest and toss the pellet out of their roost. By dissecting these sterilized pellets and assembling the bones found in them we will discover what they eat. Then, the group will take owl calls outside to see if we can get our local owls to answer back.

For adults and children five years and up. Children must be accompanied by an adult. Instructor: Susannah Graedel
Program #401051A Fee: \$12

MAPLE SUGARING

Saturday, 3/7
1:00-2:30 p.m.

The Bauer farmhouse is framed by two large sugar maples, trees that the Bauer brothers may have used to make maple syrup. Come and learn how maple syrup is made, from tree to table. We'll tap some of Bauer Park's maple trees, taste the sap, and learn how to turn it into syrup (which we'll also taste!). Information on where to acquire sugaring supplies, and when, where and how to tap the maple trees in your own yard will be provided.

For all ages. Children must be accompanied by an adult. Instructor: Julie Ainsworth
Program #401051B Fee: \$10

WEEKEND LETTERBOXING

Saturday, 3/14
9:00 a.m.-12:00 p.m.

A real Letterboxing 101 class to introduce families to the joys of letterboxing! You will learn: basic etiquette and definitions, where to find letterbox clues, what to bring with you when letterboxing, what a letterbox might look like, protocol for stamping in, logging your finds, what to do if you find a hitchhiker, and more! Start thinking about a family "trail name" and an image that might represent it. Each family will carve a signature stamp, and then we will go in search of the Bauer Park letterboxes! For families with children age 8 and up. Children must be accompanied by an adult.

Instructor: Diane Adams
Program #401058A Fee: \$16

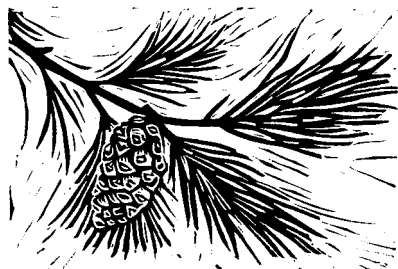
PROGRAMS FOR ADULTS & HIGH SCHOOL STUDENTS

LEARN TO ID TREES IN WINTER

Sunday, 2/8
1:00-3:00 p.m.

Take a walk on the trails of Bauer Park and quickly learn to identify trees without their leaves. Then, warm up inside as we identify species by their unique twigs and buds. Marvel at the beauty of the intricate structures under the microscope.

For adults and high school students. Instructor: Susannah Graedel
Program # 401063A Fee: \$12



GET READY FOR BLUEBIRDS!

Saturday, 4/4
1:00-3:00 p.m.

Bluebirds start nesting in Madison in early spring. Indoors we will learn about what these lovely songbirds need to raise a family. Nest box plans are available. See a video of babies hatching and growing in the nest box. Then tour the Bauer Bluebird Trail to see the birds in action. Learn how to become a bluebird nest box monitor as part of the Cornell Lab of Ornithology citizen science program.

For adults and high school students. Children 5 years and older are welcome if accompanied by an adult. Instructor: Susannah Graedel
Program #402071A Fee: \$12

CHILDREN'S PROGRAMS

VACATION LETTERBOXING

Tuesday, 2/17
10:00 a.m.-12:00 p.m.

Have you found the letterboxes at Bauer Park? Would you like to help plant one? Come learn about the history of letterboxing, etiquette and definitions, logging your finds, what to do if you find a hitchhiker, and more! Weather permitting, we will go out on the Bauer trails and find the existing boxes (one will be planted especially for this class) and plant one of our own. Bring your letterboxing kit if you have one (notebook and signature stamp) and wear appropriate clothing and footwear. For children in grades 4-6.

Instructor: Diane Adams
Program #401058B Fee: \$12

Programs continued on next page...

CHILDREN'S PROGRAMS (CONTINUED)

NATURE'S CLASSROOM AT BAUER

Mondays, 1/12, 1/26, 2/2, 2/9, 3/9, 3/16, 3/23
12:30-2:30 p.m.

Join us for fun and adventure as we learn and play at Bauer Farm. We will hike, explore the ponds and woods, and use what we find to create crafts. Dress appropriately to be outside and bring a small nut-free snack and drink. Sign up for any or all of the classes. For children ages 4-6.

Instructors: Shari Lariviere, Diane Newton
Program #401049E Fee: \$12/class

MICRO-BIOLOGISTS: SEA

Wednesdays, 1/14, 1/21, 1/28, 2/4, 2/11

Session A: 9:00-10:30 a.m.

Session B: 1:00-2:30 p.m.

The ocean will come to Bauer Park as we learn about plants and animals that live in the sea. Each week, we'll observe live or dried marine specimens in the classroom, working our way up the food chain from plankton to penguins. Each class includes a story, an art project and experiments.

For children ages 4-6.

Instructor: Julie Ainsworth

Program #401049 Fee: \$50

MICRO-BIOLOGISTS: LAND

Wednesdays, 3/4, 3/11, 3/18, 3/25, 4/1

Session C: 9:00-10:30 a.m.

Session D: 1:00-2:30 p.m.

Each week, junior scientists will explore a different ecosystem at Bauer Park – the forest and meadows, wetlands, ponds and streams – searching for signs of spring. We'll make nature journals to record our discoveries. Each class includes a story, craft and outdoor exploration.

For children ages 4-6.

Instructor: Julie Ainsworth

Program #401049 Fee: \$50

KINDERGARTEN ENRICHMENT

Discover a fun way for your kindergartner to spend the other half of the day. Each class includes a story, game, craft and outdoor exploration. Adult care-givers are welcome, but not required, to attend. For children currently in kindergarten.

Instructor: Julie Ainsworth

KEEPING WARM

How do animals stay warm in the winter? We'll experiment to find colors and materials that make the best insulators, then look at the many ways animals cope with the cold. Session A: 9:00 - 10:30 am, Thursday 1/22
Session B: 1:00 - 2:30 pm, Thursday 1/22
Session C: 9:00 - 10:30 am, Friday 1/30
Session D: 1:00 - 2:30 pm, Friday 1/30
Program #401064 Fee: \$10

WHAT'S FOR LUNCH?

From plants to predators, we'll explore the levels of the food chain and construct a food web. Then, to discover what owls eat, we'll dissect owl pellets and assemble the skeletons we find inside.

Session E: 9:00 - 10:30 am, Thursday 2/26

Session F: 1:00 - 2:30 pm, Thursday 2/26

Session G: 9:00 - 10:30 am, Friday 2/27

Session H: 1:00 - 2:30 pm, Friday 2/27

Program #401064 Fee: \$10

AS THE WORM TURNS

Prepare for Earth Day by learning about the earth's master recyclers: worms! Hunt for worms, then conduct experiments to learn more about these amazing creatures.

Session I: 9:00 - 10:30 am, Thursday 3/26

Session J: 1:00 - 2:30 pm, Thursday 3/26

Session K: 9:00 - 10:30 am, Friday 4/3

Session L: 1:00 - 2:30 pm, Friday 4/3

Program #401064 Fee: \$10

MINI-EXPLORERS

Come join in the fun of exploring! We will learn about nature and science through activities such as hiking, singing, games, reading and making crafts. Indoor/outdoor programs – dress for the weather. For Pre-schoolers ages 3 – 5, with adult.

Instructor: Donna Dione

THE WONDER OF WATER

Friday, 1/16

Session A: 10:00 - 11:00 am

Session B: 1:00 - 2:00 pm

It may be too cold to go swimming outside, but discovering the wonders of water is never out of season. While doing fun experiments, we will learn interesting facts about water. Class will take place inside.

Program # 401057 Fee: \$8

ANIMAL TRACKS AND TRACES

Friday, 2/13

Session C: 10:00 – 11:00 am

Session D: 1:00 – 2:00 pm

While it may seem too cold to survive outside in February, many animals are scurrying all around our forests and fields. Go on a mystery hunt for tracks and other signs of winter animals and create a fun craft to help you remember the tracks you saw.

Program # 401057 Fee: \$8

IT'S SUGARING TIME!

Friday, 3/6

Session E: 10:00 – 11:00 am

Session F: 1:00 – 2:00 pm

Maple trees are waking up as hints of spring arrive at Bauer Park. Learn how to tap the trees and then how to collect the sap to turn it into syrup. Make a craft to remind you of how special maple trees are.

Program # 401057 Fee: \$8

MUSICAL STORYTIME

Tuesdays, 1/13, 1/27, 2/10, 2/24, 3/10, 3/24
10:00-11:00 a.m.

Learn about our local wildlife through music, movement and story! Each class will be based around what can currently be found outdoors in Connecticut—what lives in your backyard in the wintertime? There will be some repetition in programs to encourage learning, but feel free to attend single or multiple classes. Depending on the weather, classes may include a short time outdoors or a craft.

For children ages 3-5, with an adult.

Instructor: Diane Adams

Program #401058C

Fee: \$8/class





Volunteer Fun!

Bauer Park is, without question, one of Madison's crown jewels. But it requires care to keep it in good shape. The Bauer Park Advisory Committee and the Beach and Recreation Department are constantly coming up with ways to maintain, improve and promote all that the park has to offer. Many hands make light work, as they say, and we could really use extra hands, minds and hearts--just one morning a year, a few days each season, or year round! No specific skills are necessary. If you love Bauer Park like we do, take a look at the list below for opportunities to put that interest to work. Drop us an email and we'll contact you when the group is meeting!

Bauer Park Harvest Festival:

Our most visible event and a really fun day! Help with overall planning, soliciting donations and sponsors, initiating new games, programs and speakers... Join the camaraderie this group finds in creating this annual, family-friendly event.

Community Garden Group:

Plan, organize or just help with talks, potluck suppers and other events that put the "community" in our community gardens.

Gardens and Displays Group:

Help keep the ornamental gardens, blueberry patch and orchard beautiful and bountiful while learning by working with experienced gardeners. Plan gardening talks and events, too.

Bauer Newsletter: For people who love writing, photography, drawing or who are simply willing to help with distribution.

Greenhouse Management: Our new greenhouse is nearly up and running; we'll need extra help this spring! Help plan a class in starting your own plants from seed.

Trail Maintenance: Love to take walks in the park? Like to see better trails? There are lots of opportunities for you in this group!

*For any of the above groups Contact:
Barbara Yaeger: iplayindirt@sbcglobal.net
Heather Atwater: heathsail@sbcglobal.net
Cary Gazda; Gazdac@madisonct.org*

Organic Mulches

(continued from page 1)

Hay or straw - A 6- to 8-inch layer of hay or straw provides good annual weed control. These materials decompose quickly and must be replenished to keep down weeds. They stay in place and will improve the soil as they decay. Avoid hay that is full of weed seed and brambles. Fresh legume hay, such as alfalfa, supplies nitrogen as it quickly breaks down. Both are recommended for vegetable and fruit plantings.

Pine needles - Baled pine needles are also found in garden centers for use as a mulch. They make an excellent mulch around shrubs, trees, and in other areas where a long-lasting mulch is desired.

Grass clippings - A 2-inch layer of grass clippings provides good weed control. Build up the layer gradually, using dry grass. A thick layer of green grass will give off excessive heat and foul odors. However, in limited quantity, clippings will decompose rapidly and provide an extra dose of nitrogen to growing plants, as well as making fine humus. Avoid crabgrass and grass full of seed heads. Do not use clippings from lawns which have been treated that season with herbicide or a fertilizer/herbicide combination. Grass clippings may be used as mulch around vegetables or fruits, or composted. They are an excellent source of nitrogen to heat up a compost pile, especially for those gardeners without access to manures.

Leaves - A layer of leaves, 2 to 3 inches thick after compaction, provides good annual weed control. Leaves will decompose fairly quickly, are usually easy to obtain, attractive as a mulch, and will improve the soil once decomposed. To reduce blowing of dry leaves, allow to decompose partially. Highly recommended as a mulch. **Note:** Leaves of the black walnut tree (*Juglans nigra*) are an exception due to the presence of juglone, a chemical that inhibits growth of many plants.

Peat moss - A 2- to 3-inch layer of peat moss will give fair to good weed control. However, peat tends to form a crust if used in layers thick enough to hold down weeds. It is very difficult to wet, and it tends to be blown away if applied dry. Peat is also a relatively expensive mulching material, probably more suitable for incorporation into the soil.

Compost - A 2- to 3-inch layer of compost is a fair weed control. Most compost, however, provides a good site for weed seeds to grow. It is probably better used by incorporating it into the soil since it is an excellent soil amendment. A layer of compost may be used on overwintering beds of perennials, such as asparagus or berries, to provide nutrients and help protect crowns.

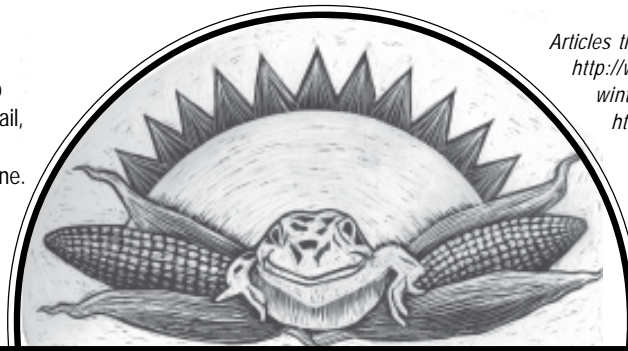
Hulls and ground corncobs - A 2- to 4-inch layer of these materials will provide fair weed control, but both have a tendency to be easily blown by the wind. Peanut hulls will stay in place somewhat better. A heavier mulch, such as partially rotted hay or straw, may be used on top to hold down the lighter materials. Recommended if readily available in your area.

Bark and wood chips - A 2- to 3-inch layer of bark provides good weed control. Wood chips are slower to decay than shredded bark, and can be used as a pathway material in raised beds.

In the Next Issue: Inorganic Mulches

DID YOU KNOW??

The shape of the paw print alone is not enough to distinguish wild from domestic dogs. The entire trail, and where you find it, will be more telling. Wild canids most often walk or trot in a fairly straight line. They place their hind feet directly into the print left by the respective front foot. Domestic dogs produce wandering trails and rarely manage to step accurately into the front feet prints.



Articles this page adapted from
<http://www.naturenorth.com/winter/tracks/trkgdF.html>,
<http://www.dnr.state.wi.us/org/caer/ce/eeek/nature/track.html>,
www.ehow.com/how_4677149_sun-catcher-winter.html

Make an Ice Suncatcher!

You'll Need:

- Water
- A shallow aluminum pan (a pie pan works well)
- Dried fruit slices
- Pressed leaves, pine cones and other natural materials
- Cord or ribbon

1. Add water to your aluminum pie pan until it's about 1/4 inch deep. Place the pan into the freezer or outside until frozen solid.

2. Lay your cord or ribbon along the outer edges of the frozen pan extending full circle. Leave several inches overhanging at the top so you can tie your sun catcher to a branch once it's completed.

3. Arrange the materials you've collected into a pleasing design on the surface of the ice, then slowly and carefully pour more water over it. Your pieces may move a bit, but that shouldn't alter your design significantly.

4. Allow to refreeze to lock your design into place.

5. Allow your sun-catcher to set at room temperature until it can be easily released from the pan. You can now tie it to a tree branch outside. Be sure the temperature is below freezing! You'll be able to enjoy your beautiful suncatcher until the temperature climbs above freezing and melts the ice.

The Bauer Bushel

A P A G E F O R K I D S !

CALLING ALL WINTER SLEUTHS!

On the Trail of the Trout!

Can you find Bauer Park's newest letterbox? These clues, and many others, can be found at www.letterboxing.org.

Cross Copse Road and enter the Woodland Trail. Important: you will stay on the red-blazed trail unless otherwise noted! Walk on the wooden planks, pass the Poison Ivy sign and head for the pond. Apparently this was a trout farm experiment back in the 1960s, and the Trout letterbox is planted in its honor. Pass the pond and bear left. Go over the Munger bridge. Talk a walk on the boardwalk. Be sure to go left at the T when you see houses. Continue to follow the curvy boardwalk along the wall by the houses. Bear left at the next T to go back into the woods.

After passing several large downed trees on the right, you will come to a fork. This is the only time you will leave the red trail! Take the right fork up the hill, through the opening of a stone wall. Go about 8 ft. past the wall and turn left. 10 steps more will take you to a triangular rock, followed by a thin beech tree. Stand in front of the beech facing the wall, and you will see a large tree on the other side of the wall, shortly before the red trail. The trout is hiding in the wall directly in front of you, hidden by underneath a somewhat suspicious pile of rocks (SPOR) which you will need to move to reach the box.

After stamping in, please rehide carefully, feeling free to add leaves, etc.

Return to the red trail. You may either return the way you came, or continue on the loop. If you continue, watch the red blazes carefully—you will need to turn left soon! Once you reach the field, bear left to return to your starting point.

Wear appropriate footwear: paths may be muddy!

Follow that paw print...!

Have you ever tracked someone's footprints in snow? It can be a mystery figuring out where someone was going and what they were doing. By looking carefully at animal tracks you can learn more about their comings and goings, too.

Winter is the perfect time to put on your detective hat and follow some animal tracks. Pick a day right after a snowfall and see how many different types of tracks you can find. Think about what kind of animals live in the area. This will help you narrow the field of identification. It's a pretty good bet that if you're looking in your backyard you'll find squirrel, bird, and maybe rabbit tracks.



Front



Rear

Four toes on each of the front and hind feet means you're looking at a track from the dog family (fox, wolf, coyote, neighborhood dog) or the cat family (bobcat, lynx, neighborhood cat). Does the paw print have small triangular marks in front of it? If yes, those are claw marks. Raccoons, skunks, coyotes, foxes, and dogs will often leave claw marks. Cats, on the other hand, retract their claws when they walk or run.

Four toes on the front foot and five toes on the hind foot means it's a rodent (mice, voles, chipmunks, squirrels, woodchucks, muskrat, porcupine).



Front



Rear

If the track has five toes each on the front and back feet it's from a raccoon or a member of the weasel family (weasel, mink, skunk, otter) or it's a bear, beaver, opossum.

If you find a two-toe track that looks like a split oval, it's probably a deer. Is the track made by a "hopper?" Squirrels leave interesting tracks. As they bound along, their larger hind feet land ahead of their smaller front feet. It looks like the front feet are side by side. Rabbit tracks look a little different. The hind feet still land ahead of the front feet, but the front feet are not found right next to each other.

What direction is your animal going? Claw marks point in the direction the animal was going. If there aren't any, see if you can see where the snow is pushed back by the animal's feet. These areas shows the direction the animal came from.

Tracks clockwise from upper left: dog, rabbit, deer, raccoon and squirrel.