



THE ROOKERY



Missisquoi National Wildlife Refuge
Swanton, Vermont
Youth Newsletter

SPRUCE

- needles grow individually on the branch (as opposed to in clusters)
- needles are stiff and sharp
- the cross section of the needles are either square or triangular in and can be easily rolled between your fingers
- when needles are detached from branch, woody projections are left behind and the branch feels rough
- cones grow from a central stem and feel papery and thin; scales overlap



PINE

- needles grow in clusters of 2, 3, or 5
- pines with clusters of 2 are red pines
- pines with clusters of 3 are yellow pines
- pines with clusters of 5 are white pines
- needles are bundled together at the base of the cluster
- needles lengths vary greatly among the different pines
- cones grow from a central stem and feel woody and thick; scales overlap
- seeds are located at base of scales; some cones have scales tipped with a sharp point



FIR

- needles grow individually on the branch (as opposed to in clusters)
- needles are flexible and flat
- cannot be rolled between your fingers; needles have suction cup-like attachments, there are no woody projections
- when needles are detached from branch, a small circular leave scar is left and the branch feels smooth
- cones scales overlap and are not woody (feel papery and flexible)
- cones grow upward toward the sky and often fall apart while still on the tree



HEMLOCK

- easily recognizable by their gracefully drooped branches
- needles grow along opposite sides of the branch (as opposed to all around) and are attached by woody pegs
- needles are flat with 2 white perpendicular lines on the underside
- needles are blunt at the tips
- cones grow at tips of branches and are only about 1 inch in size
- cones scales are thin and flexible



Playful Learning www.playfullearning.net

Coming Events

Monthly Bird Walk - Saturday, December 13 - 8-10 a.m. Black/Maquam Creek

Bird Tales - Thursday, February 5 - online - Check website for link

Winter Walk Scavenger Hunt

How many can you spot?
Color in as you find them

| | | | |
|--|-------------------|--|----------------|
| | Holly | | Robin |
| | Thistle | | Icy Puddle |
| | Bare Tree | | Tree Stump |
| | Crispy Leaf | | Red Berries |
| | Snow | | Mouse |
| | Frosty Spider Web | | Footprints |
| | Animal Burrow | | Evergreen Tree |

Spot it! Can you see your breath in the cold air?

Make bird food! Find a pinecone, cover with a mix of suet and seeds, and hang up for the birds!

www.homeschoolshare.com

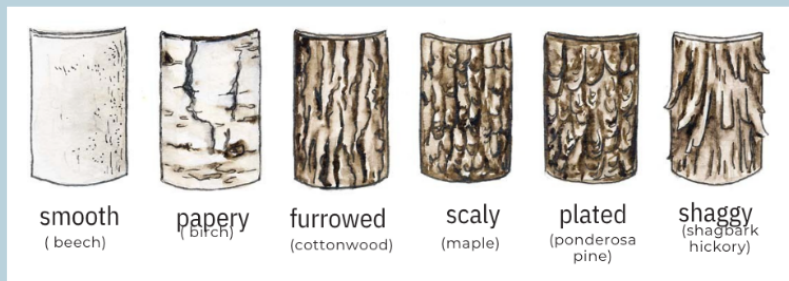
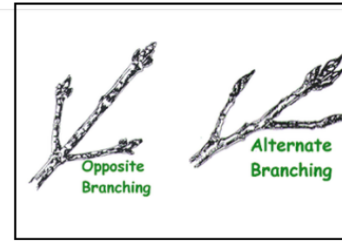
For more info about the Refuge:

- friendsofmissisquoi.org
- fws.gov/refuge/missisquoi

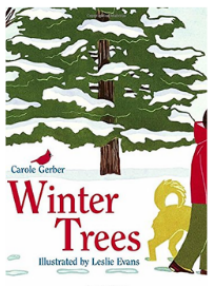
Tips for Identifying Deciduous (opposite of evergreen) Trees in Winter

MADHorse - use this mnemonic to help:

Trees with opposite branching buds } **M**aples
Ashes
Dogwoods
Horse Chestnut



Check out these books for more info!



Winter tree ID

- Ash**: Look for velvety black buds on grey twigs.
- Beech**: Look for long, pointy, brown buds.
- Elder**: Look for buds sitting opposite each other.
- Hazel**: Look for yellowy-green catkins hanging down.
- Oak**: Look for groups of buds at the end of the twig.
- Horse chestnut**: Look for fat, sticky, brown buds.
- Field maple**: Look for small, grey leaf buds.

Remember, look at twigs and buds for clues to a tree's identity.
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