# **Demarest Nature News**



Demarest Nature Center Association Box 41, Demarest, N.J., 07627 www.demarestnaturecenter.org Winter 2032 Vol. 49, No. 1

#### PRESIDENT'S MESSAGE

It is a great time to visit the Demarest Nature Center! The forest is having its annual rest in the Winter, and the trails will soon be covered with snow. The forest will then enter Spring, and life will continue its annual cycle of renewal. Come and admire Nature's beauty, both the forest and the wildlife!

We have a lot planned for 2023, including guided walks, birdwatching, lectures, canoe days, wildflower planting, and maple syrup making. We also sponsor the nature center field trips every year for the children in Demarest schools. Starting in January 2023, the Nature Center is excited to charter a new Boy Scout troop in Demarest (Troop 220).

We will continue to serve as a learning hub for the community, and as a refuge for nature. We are all volunteers, and we use funds to maintain the trails and support our programming that benefits the community. Your memberships and donations help to support these efforts. We also partner with other organizations. For example, Veolia lends their canoes for our annual Canoe Day and Fall Festival (Oktoberfest).

Join us on Saturday, February 11 from 10:00 AM – 1:00 PM for our Maplefest Breakfast in the Woods. We will demonstrate the tapping of maple trees, and how to

HOLL

Did you know that if holly (llex aquifolium)

aquifolium) finds its leaves are being nibbled by deer, it switches genes on to make them spiky when they regrow? So on taller holly trees, the upper leaves (which are out of reach) have smooth edges, while the lower leaves are prickly.

www.facebook.com/ AmericanForests make maple syrup. Come early, while the supplies of maple syrup and pancakes last! Meet at the Imagination Playground near Wakelee Field.

Stephen Tillack, President, Demarest Nature Center



I wanted to start off by saying how special the Demarest Nature Center is to me and all the wildlife that call it home. I have made many memories to last a lifetime. It has been an honor and pleasure doing the newsletter for the past couple of years. This will be my last newsletter as my terms on the board have ended. I hope to return in the future. I leave you with these words.- Kindness is the universal language that can be spoken by everyone. — Kim Nagelhout, Trustee



Your membership dollars allow us to continue to give back to the community and preserve and protect DNC's 55 acres of meadows, forests and wetlands.

### **Demarest Nature News** THE BIRTH OF A SNOWFLAKE

Snow is not simply a frozen droplet of water falling from a cloud. What makes a snowflake different is that it forms slowly, and that it grows in the cloud.

A snowflake is born when water vapor travels through the air and condenses (changes from a gas to a solid) on a particle. There it forms a slowly growing crystal. There are two basic ways that the vapor can condense. Each way plays a big role in the shape that the snowflake will eventually take.

The first way is to form what are called 'facets.' A facet is essentially a flat face on a 3D shape, like a prism. They form naturally when a crystal grows. In ice crystals the shape they take mirrors the shape of the molecules forming the crystal. The crystal structure of frozen ice is a six-sided shape. Therefore an icy facet is six-sided as well. That is where the symmetry in a snowflake comes from.

The second way to grow a snowflake is to form branches. Not surprisingly, this is what creates those beautiful tree-like structures. Branches form because water vapor will condense on the first thing it touches. If there is a small bump on a flake's surface, the vapor will condense there instead of traveling any further. Now the bump is bigger and even more likely to 'catch' water vapor at that point. The process repeats itself and a branch is formed!

## **THEY ARE NATURE'S** GARDENERS

Squirrels have an important ecological role, especially in forest ecosystems. Their biggest contribution to the forest is in shaping plant composition. They have a peculiar habit of taking seeds, which are their main source of nutrients, and burying them. They bury them throughout the environment, and often, when they go back and look for them, they forget where they are. Over time, this behavior,

called caching, changes the composition of a forest. They will expand forests and change the types of trees that are there.



### **BENEFITS OF SNAKES IN THE GARDEN**

Garter snakes are a gardener's friend! Harmless to humans, they eat the pests that wreak havoc in your garden. There are many types of garter snakes found all across North America, including the Demarest Nature Center. They have a variety patterns and markings, and can be brown, tan, olive, or black with yellow, red, orange, or even blue stripes down their sides and backs. Some are all black. They can grow to be over 4 feet long, but most adults reach only 2-3 feet in length.



- · Often called "gardener snakes," they earn that name by eating grasshoppers, slugs, grubs, and other insects. A large adult garter snake may even eat mice. (Unfortunately, they also eat some critters such as frogs, toads, salamanders, and earthworms.) To eat large prey, they unhinge their jaw from their skull. Back-curving teeth keep the prey from escaping.
- Since they grow throughout their lifetime, snakes need to shed their skin when it gets too small. To do this, they rub their head on something rough to hook the skin near their lips and as they crawl out of it, the skin is turned inside out.
- Garter snakes won't bite you unless provoked. They won't chase you. They are really very shy and are not looking for a fight.
- Garter snakes do produce a very weak venom, but the venom is so mild that it rarely has any effect on humans (however, it can cause light swelling in those who are allergic). The snake uses its venom to subdue larger prey items, like frogs and mice.
- Active year-round in the south, in the northern half of North America they hibernate below the frostline in the winter, congregating in large numbers in burrows and crevices to keep warm during the cold months. In the spring, they emerge and mate.
- Females only breed every 2 to 3 years. They bear live young in the late summer, usually having between 4 and 20 babies.
- It takes 2 years for garter snakes to reach maturity and they can live to be 10 years old in the wild.

WINTER BIRDS OF DEMAREST Each fall millions of birds fly south for the winter in search of warmer weather and a more favorable climate with abundant food. In the Northeast, most people think of birds heading for tropical destinations, such as Central and South America. While one hardly thinks of this time of year in New Jersey as a desirable destination, some birds actually fly in from more northern latitudes to spend their winters here. This is in addition to the numerous species that spend all year in our state, adding to the diversity of birds that we see and enjoy in the cold months of winter. Some species, such as the Blue Jay, are year-round



residents. However, individual birds of those species may choose to fly south to warmer regions. Others may fly to our area from more northern locales. This pattern can vary from year to year depending on weather and available food. A back-yard feeder can attract a variety of birds in the cold weather and can supplement their natural food source, which can be scarce, especially when the snow falls. Dark-Eyed Juncos and White-Throated Sparrows are common winter migrants. A ground feeder, the Dark-Eyed Junco (pictured above) can often be seen in flocks around our area. - JEFFREY SHAARI

### **Demarest Nature News**

#### TOP 10 REASONS TO LEASH YOUR DOG

Virtually every community has a leash law. The law requires that dogs be kept on a leash at all times when on public property. While on private property, dogs



must be under control of their owners. The intent of the law is to protect the health and safety of the public and to protect your pet. The use of a leash will benefit you, your neighborhood, and your pet. There are many good reasons to keep your dog on a leash.

- 1. It's a great good neighbor policy, preventing your dog from trespassing on the neighbor's property during your walk. It also keeps your dog from jumping on people you encounter, ensuring that your dog has the chance of being properly introduced.
- 2. Improved companionship. A well trained and leashobedient dog is a pleasure to walk with.
- 3. Walking your pet on a leash will prevent the spread of disease. It is less likely that your dog will be exposed to Parvo or Distemper. A leashed dog can be restrained from sniffing the droppings of other animals.
- 4. A leash is commonly referred to as "Your Pet's Lifeline," protecting your pet from traffic and unrestrained animals. Accidents or animal bites are greatly reduced when responsible pet owners obey the leash law.
- 5. An obedient and well behaved dog is a positive reflection of its owner.
- 6. Re-locating your dog into another household is 100% easier if your dog is obedient and leash trained.
- 7. It's a great way to reward your dog. Your dog will immediately respond with a wagging tail the moment he or she sees you holding the leash.
- 8. It's a great identification tool, symbolizing that the dog has an owner, and enabling someone who sees the leash and identification tag attached to the dog's collar to find you if you and your pet should become separated.
- 9. It's a great relief to wildlife, keeping your dog from chasing squirrels, deer, and other wildlife.
- 10. It's the law! The law is in place to protect other members of the public and your pet from injury.

This information is courtesy of The Bill Foundation

### THE MIGHTY OAK QUERCUS SPP



Ray Slaman Certified Arborist, LTE #710

Mentioning oak trees in a

conversation will usually evoke an image of a large, majestic specimen with heavy branches and a majestic crown of leaves. Oaks convey power and strength and ruggedness. The wood from oaks is strong and sturdy. Many poems and stories were written beneath the shade of the oak tree. This popular reputation is well deserved, for the oak holds a unique place in the ecosystem. If it is true that every organism is dependent on other organisms to survive, the oak sits in the center of a thriving and diverse community or creatures.

Professor and author Doug Tallamay has done extensive study and written several books on the critical role the mighty oak plays in the ecosystem, a more critical and diverse role than nearly any other tree species. He has discovered that during its natural life, that can exceed many hundreds of years, "...the oak tree will drop up to 3 million acorns and serve as a lifeline to countless creatures, including dozens of bird species, rodents, bears, racoons, opossums, rat snakes, fence lizards, several butterflies, hundreds of moths, ... and dozens more species of arthropods, mollusks, annelids that depend on oak leaf litter for nourishment and protection." And by extension we humans are dependent on, and indebted to, the mighty oak.

There are two main families of oak species; red oak (including scarlet oak, pin oak, willow oak, and black oak, among others) and white oak (including chestnut oak, bur oak, and live oak, among others).

An easy way to distinguish between these two groups is to examine the leaves; Red oak leaves generally have sharp lobes while white oak leaves generally have more rounded lobes. The easiest way to identify an oak tree is simply look for their acorns. No other tree produces this distinct fruit.

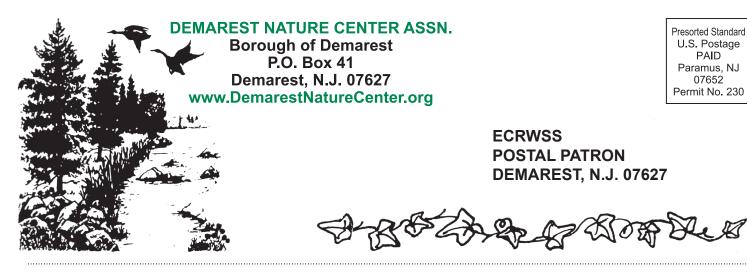
Oaks as a species are under tremendous threat. It is reported that more than 30% of the oak species in North America are at risk of extinction. Where oaks had represented 55% of all eastern US trees, they now account for 25%. Part of having a healthy world suitable for humans, is a world healthy enough for the mighty oak.



## SKUNKS ARE BENEFICIAL CRITTERS

They are omnivorous and eat a variety of garden pests, including mice, voles, beetles, various larvae, wasps and crickets. Skunks are also scavengers. They will seek out animal carcasses, which helps keep an ecosystem free of carrion. Scavengers are important to the health of the environment.

www.demarestnaturecenter.org



#### DNC 2023 UPCOMING EVENTS

Watch out for exciting events happening at the Demarest Nature Center in 2023. Check our newsletter, Facebook, website, flyers and notices.

#### DemarestNatureCenter.org/events

Maplefest Breakfast in the Woods and ice skating! Saturday, February 11th from 10:00 AM – 1:00 PM at Imagination Playground.

Demarest Nature Center John Goodwin Photo Contest (deadline extended to March 1st, 2023) - submit your favorite photo of the Demarest Nature Center! Submissions can be emailed to Events@demarestnaturecenter.org

#### **Native Wildflower Seeds Planting!**

Spring Migratory Birdwatching with Bergen County Audubon Society. Learn how the honey is made from a beekeeper!

Nature Walk and Cleanup Day March 25, 2023 - Come walk through the woods with an expert guide. You will learn about the forest ecosystem. Immediately afterwards we'll collect all kinds of interesting things throughout the woods to keep it looking great.

Celebrate National Trails Day on June 3, 2023 - Volunteer to clean up and improve our trails at the nature center! Tree Walk with Master Arborist Ray Slaman - learn all about our trees in the nature center!

Audubon Adventures learning kit program & activities about nature around us: "Birds, Bees, Flowers & Trees"

"Nature's Connections: Water, Plants & Climate"

"Birds Around Here and on the Move"

Fall Migratory Birdwatching with Bergen County Audubon Society. Fall Festival and Craft Show 2023! (October 7, 2023)

#### email: info@demarestnaturecenter.org

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#### **2022 EVENT PHOTOS**

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