



# *the* ***Pileated Press***

*Western Maine Audubon, a chapter of Maine Audubon*

Box 832, Farmington, ME 04938

## **- Our Fall Talks 2021 -**

All talks will be at the usual time and day - 7:00 pm on the second Wednesday evenings of September, October, and November. It is uncertain at this time whether we will be able to hold in person talks or whether we will need to do Webinars as we did last spring. Please consult our webpage, [western.maineaudubon.org/events](http://western.maineaudubon.org/events), closer to the time of each talk to find out about that talk. If we have your email address you will receive a reminder email with details before each talk.

### **September 8 - What You Should Know About the Threat of Aquatic Invaders in Maine.**

**Speaker: Roberta Hill**

What makes an organism invasive? What threats do invasive organisms pose to Maine's native ecosystems? How do invasive aquatic species impact humans? What are the drivers behind introduction of invaders to Maine and the vectors exacerbating their spread within the state? What are some of the invasive species we are most concerned about here in Maine? What is Maine doing to address these concerns? Importantly, what can WE all do to help? In her talk, Roberta Hill, Invasive Species Program Director for Lake Stewards of Maine, will answer all of these questions and more!



Source: Les Mehrhoff

*Roberta is an aquatic ecologist and environmental educator who has been active in the field of lake protection and community outreach in Maine for thirty years and instrumental in the creation and development of some of Maine's most successful and long-standing lake education programs. Currently the Invasive Species Program Director for Lake Stewards of Maine, Roberta is the originator and coordinator of LSM's internationally recognized Invasive Plant Patrol (IPP) program, through which over 5,000 individuals (volunteers, professionals, agency personnel, students, teachers and others) have now been trained to screen Maine waterbodies for the presence of invasive aquatic plants and animals. Roberta is the principal author of **Maine Field Guide to Invasive Aquatic Plants**, co-author of **Citizens' Guide to Invasive Aquatic Plant Management**, and principal content developer for **Maine Field Guide to Aquatic Phenomena** (which will be available both online and as a downloadable smartphone application this July).*

*Blossom of Yellow Floating Heart, by Lake Stewards of Maine*

## October 13 - Ethical Questions for the Outdoor Naturalist

Speaker: Doug Hitchcox

Birding, and other wildlife observing, provides an intimate connection to nature that makes us better stewards of the environment and even provides us with wellness and mental health benefits, but through our pursuits, are we doing more harm than good? In this program, Maine Audubon's Staff Naturalist, Doug Hitchcox, will talk about many of the ethical issues that we confront as bird watchers, and dispel some of the myths that exist in our relationship with nature. Topics will range from: bird feeding, does it actually help birds? Why are bird friendly yards reportedly more deadly for birds? Should you join the "chase" to go see a rare bird being reported? Why do cats need to be kept indoors? When should you let nature take its course or when should you intervene? Many of these questions may raise ethical or social dilemmas, but Doug will provide the science-based answers that put the birds, and other wildlife, first.



*Too close?, by Doug Hitchcox*

## November 10 – Unique Characteristics of Trees

Speaker: Patty Cormier



*American Chestnut*



*Sugar Maple*



*Ash*

Photos by Burt Knapp

Why do trees have individual characteristics? Why is some bark smooth and some rough? Some light colored and some dark? Why are some leaves lobed and some smooth along the edges? Patty Cormier will answer many of these questions and more. This is, she says, one of her favorite topics.

*Patty Cormier was appointed as Maine State Forester in 2019. For the previous 20 years, she was a District Forester for the Maine Forest Service first in the mid coast, then in the western mountain regions. Prior to that, she was a Landowner Assistance Forester for Georgia Pacific Corp. in Downeast Maine for 10 years. Over the years, Patty has been involved in organizations such as supervisor on the Franklin County Soil and Water Conservation District, Farmington Conservation Commission member, secretary and Somerset County chair for the Maine Tree Farm Committee, and former board member of the Maine Woodland Owners of Maine. Patty is an on-call firefighter for the Farmington Fire Department as well as a part-time Advanced EMT for Northstar Ambulance. Patty grew up in the beautiful western mountains in Kingfield and now lives in Farmington with her husband and two dogs.*



## - President's Column - Nancy Knapp

*Photo Credit: Burt Knapp*

Greetings Everyone,

Spring is heading into summer; our world is green again and we have regained some of our freedoms. The WMA Board met periodically in one of our greenhouses, socially distanced, warm and “outside” to continue planning our educational sessions. We are hoping these will be in-person events this fall although where and if are still uncertain. If we can meet in person, each event will be recorded and put on the web site although we will not be able to live stream them.

Our September talk will feature Roberta Hill from Lake Stewards of Maine, the organization which monitors invasive aquatic plants in our lakes. She will discuss all aspects of invasive plants in our wonderful lakes, how to identify them, prevent them, etc. This promises to be very informative.

The idea for our October talk grew out of our discussing the pros and cons, or ethics, of human interactions with the animal world. When should you save (or not) a bird or other animal? Should you go see a rare sighting or is that disruptive? How much should humans be interjecting themselves into the natural course of events? Doug Hitchcox, from Maine Audubon will tackle this and with his extensive knowledge of the natural world this will be fascinating and thought provoking.

Patty Cormier, well known in Farmington for her work with the Forest Service will discuss one of her favorite topics: Why trees have the characteristics they have, such as lobed vs straight edges of leaves, etc. This promises to be a fun evening with a lot of new facts for everyone. Please check the web page to find out more info on place and mode of all the fall talks.

One early AM in this spring as I walked outside and was met by a symphony of bird songs, I was struck very hard by the concept of a “silent spring.” R. Carson of course discussed the damage being done by DDT in her book by that name years ago. Can you even imagine an environment without bird sounds? I started thinking: HOW do birds sing? How do they know the songs of their own species? Here, with apologies to ornithologists, is what I have learned. Amazing and fascinating.

*Nancy Knapp*



*Magnolia Warbler in song, by Doug Hitchcox*

## **How Birds Sing – by Nancy Knapp**

Bird sounds are produced by the avian vocal organ which is called a syrinx. This is located deep in the bird's chest in an air sac that is connected to other air sacs and the lungs. A syrinx is present in all birds except vultures but its location and structure varies considerably from one species to another. In many birds, including song birds, it is at the junction where the two primary bronchi join to form the trachea. Vocalization occurs as air is expired. Vocalizations are generated by airflow induced oscillation in the wall of the syrinx. It is felt that muscles attached to and around the syrinx may contribute to the production of different sounds.

Songbirds have the most complex musculature of all birds with five pairs of muscles. This allows for more freedom in configuring the syrinx to produce different sounds. Simply put, the complexity of song is roughly correlated with the number of muscles although this fact is not absolute. For example, parrots produce complex sounds with only two muscles. There are also valves in the bronchi which control timing and phonation.

There are distinctive patterns of airflow and pressure associated with each syllable type and it is hypothesized that these patterns are stored in the brain. The sequence of actions needed to produce a brief single note is made up of many well-coordinated and complex steps.

How do juvenile songbirds learn to sing the song of their species? Cardinals learn their adult song repertoire during their first year. The early attempts bear little resemblance to adult song but gradually become adult song over about 10 months. During that time the male cardinal learns the muscle actions that are required to produce adult song guided by a template in the brain which may be either innate or learned, not yet known. Two functions of bird songs are competition for breeding territories between males and attracting a mate. It is not fully understood whether the degree of vocal dexterity attracts a mate although some studies suggest this.

Such a complex, unique and beautiful entity as bird songs should be protected at all costs against anything man could produce which would silence this magnificence.

### ***Reference:***

Suthers, Roderick (2004) How birds sing and why it matters. In *Nature's Music: the science of birdsong*. Marler, P. and Slabbekoorn, eds. Elsevier. New York. Chapter 9, pp.272-295.

## - Article -

### *Vernal Pools – by Jason Hawkins, board member*

There is a magical time of the year here in Maine when warm temperatures and rain melt the snow to create the wonderful world of vernal pools! Most of us think of frogs and salamanders who use these Spring time pools to continue their way of life, but there is more than just amphibians using these special waters.

My family and I love to keep watching as these vernal pools appear and with them the clusters of frog eggs

that are usually attached to something in the water such as a branch or root in the deepest part of the water. We have dedicated ourselves to transferring eggs from pool to pool as they dry up to help keep the life cycles revolving and to save as many creatures as we are able. This year a five gallon bucket was filled with water from one of these pools we were watching dry up, we also put a cluster of eggs in the bucket so we might witness some eggs hatch. The bucket was forgotten for a couple days and when we returned to examine the eggs, we were amazed at all the aquatic creatures we found contained in that bucket besides just the frog eggs! Squiggly creature with lots of legs and some with no legs at all! Some stayed submerged while others frequented the water's surface. Some were big and looked like sea dragons, others were small and darted around the water in a blur, while others were so small and hardly seen but moved about the water in patterns. This made us wonder what all lives in a local Maine vernal pool besides frogs and salamanders; we did some investigating to find out what we were seeing in our bucket of vernal pool water! Here is a list of some of the creatures that inhabit local vernal pools in their lifecycles. Frogs, toads, salamanders, newts, turtles, fairy shrimp, water striders, dragonflies, damselflies, caddisflies, mosquitoes all use vernal pools while animals and birds frequent these places for food sources and hydration. There is a whole world in a vernal pool that is not so easily seen unless you look closely and the creatures that seem to come and go with these pools depend on the creation of these pools for survival. We as humans have the responsibility to protect these delicate environments and to be aware of what we can do to help make sure that these lifecycles continue no matter how small and hidden they may be!



Fairy Shrimp, Licensed under the Creative Commons Attribution-Share Alike 4.0 International license. Attribution: © Hans Hillewaert

## - Nature Watch -

### *Nature news from Porter Hill Farm - articles by Burt and Nancy Knapp, photo credit, Burt Knapp*

#### **To Land or Not to Land – by Nancy Knapp**

Late last winter we were watching our hanging cylindrical bird feeder on an extremely windy day. The birds would fly towards the feeder but veer away just before landing. Almost all the birds were exhibiting this behavior so we emailed our son who has a master's degree in aeronautical engineering to see if he could explain this. Here is his reply. "Yes, that is a good aero question. Birds are amazing at landing on moving objects- branches moving in the wind



for example, so I expect it was more than all the bumpy air behind the feeder. A cylinder is basically the worst shape for shedding a turbulent wake-i.e. Lots of unpredictable bumps much like you'd see behind a big rock in a stream, so flying into that the poor birds would be getting tossed every which way."

It seems birds are well trained pilots and know when it is safe to land and will forgo food rather than risk a collision with a feeder!

### **Nature Notes – by Burt Knapp**

"What's that?" "Is it in the garden?" "It's reddish-brown and looks like the fox we've been seeing, but in the garden? That's serious".

And so, the morning began for us. We scurried out with some trepidation that we would meet up with a rabid fox, but quickly saw that it was a fawn, still with spots, and it was in the garden!

We opened the main gate in the garden fence hoping to encourage the visitor to leave by this route. I tried to go around behind the young fawn to encourage it to move away from me toward the gate, but it was skittish and took off in the opposite direction. While standing quite still, thinking about what to do next, the fawn approached me as I apparently seemed to be a two-legged, but friendly animal. It came close enough for me to touch. It was panting and must have been frightened by its ordeal. It startled as I started to move toward the gate, but quickly came back to my side when I stopped and stood still. And so it went, step by step, until we were both outside the gate. Nancy took over as I quickly moved to close the gate. She walked with the fawn at her side, "as if it were a dog", until she was around the corner of the fence and in the open field. At that point, the fawn looked around, and, seeming to know where it was, took off!

### **Window Attacks**

"Testosterone you say?" Yes, male birds are driven by testosterone as they search for a mate and/or defend their territory. Once these major events quiet, and they are engaged in family oriented paternal caregiving, their testosterone level drops. This year we have had a male American Robin, and a bright red male Cardinal each with "uncontrolled testosterone." The Robin, seemingly seeing its reflection in a window, flew repeatedly against the window, apparently defending its territory from "that intruder". Meanwhile, on the other side of the house, a red Cardinal repeatedly battered windows in both the living room and our breakfast nook. The Robin has finally quited, but the Cardinal continues his battles with the male challenger who appears in every window on that side of the house. Domesticity does not seem to be his calling as he continues to fight unrelentingly, like Don Quixote, against an impossible foe. We pray for a drop in his testosterone so we can have a moment of peace.

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**Thank you!**



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