

Newsletter Fall 2013



What does your river mean to you?



www.slsideshare.net

The Lamprey Rivers Advisory Committee members know why they love the rivers, but they want to hear your stories. What is your earliest experience? Do you have any extra special memories about something you saw, heard, or did along the Lamprey, Little, North, North Brook, Pawtuckaway, or Piscassic? Do your parents or grandparents have stories about the “good old days”? How has your river changed over time? What is your hope for your river in the future?

Do you have a good story to share? How about sharing a photograph, painting, or illustration that highlights your memory?

We will be happy to share your contributions on our website, during public events, or in our newsletters.

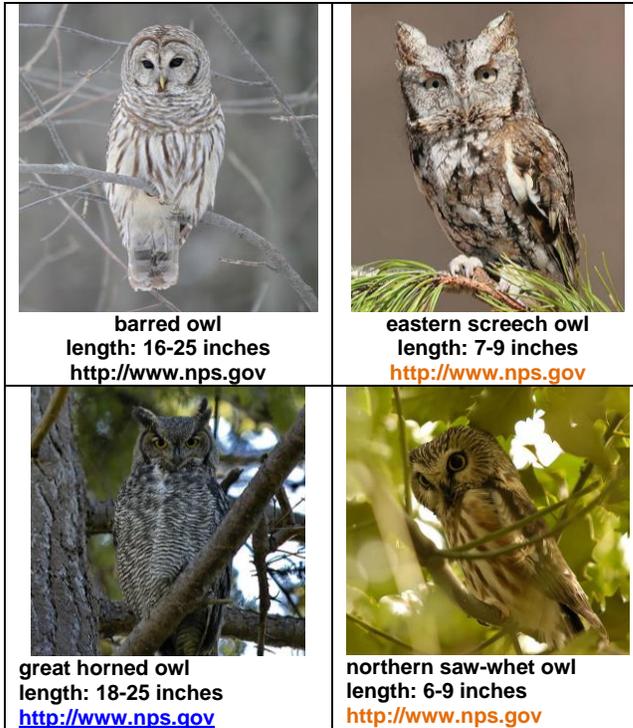
You can share your story or art work through e-mail or mail. Please contact the outreach sub-committee chair, Sharon Meeker at s_meeker@comcast.net or 203 Wadleigh Falls Rd., Lee, NH 03861.

We look forward to hearing from you! Thank you!

Whose Hoo along the Lamprey River

The Lamprey River has four species of owls that are regularly seen: barred, eastern screech, great horned, and northern saw-whet. Other owls, such as the snowy owl or the great gray owl, are occasional visitors. Worldwide, owls comprise 209 species.

Who are these common but sometimes unfamiliar birds? Many people know that owls are predators that hunt mostly in the low light between dusk and dawn, taking rodents, amphibians, birds, and sometimes insects. They have excellent, binocular vision and lop-sided ears that help them pinpoint the exact location of prey. They fly silently with soft-edged feathers that absorb sound. They often swallow their food whole, digesting and absorbing the soft parts then



regurgitating fur, feathers, and bones as a “pellet.” They have the ability to turn their heads far beyond their shoulders.

And from the “truth is stranger than fiction” department, here are some tidbits that are less well-known:

- Owl eyes are not round and they do not move in the eye socket; they are fixed in place. Owl eyes are pear-shaped, with the narrow end facing out. The wider end forms the retina in the back of the eye, giving the owl an enhanced ability to see in dim light.

- Despite their big eyes, owls are not strictly nocturnal. They can see in the daytime. Unlike human pupils, owl pupils do not shrink in response to bright light. To block out the extra light, owls lower their eyelids half-way or more. This can make them look sleepy even though they are wide awake.
- Owls have 14 vertebrae in their skinny necks. The neck only appears thick because of the fluffy feathers. The neck allows the owl to move its head in almost any direction to see better, whether to see 270° side-to-side or to get a better view of something straight ahead.
- Tufts on the heads of owls are not ears or horns. All owls have simple, flat ears that are hidden beneath the feathers located behind the eyes.
- Because their faces are flat, owls in flight often appear to be headless.
- Most owls make a variety of calls. They screech, hiss, and scream. Hoot calls usually mark territory, but not all owls hoot.
- Owl wings are bigger than wings of other birds of the same size. This extra wing size reduces the number of beats needed to fly and helps to make flight silent.
- Of the four species of owls found along the Lamprey, all are year-round residents except for the northern saw-whet owl.
- Owls do not make their own nests; they use tree cavities or abandoned crow or hawk nests.
- Owls are usually solitary, but a group of owls is called a parliament.

If you are out for a walk in the woods between dusk and dawn, listen for owls or watch as they silently swoop through the trees. For every owl that you see, know that there are many more owls that you don't see, keeping an eye on you.

Where is “Away” for Stormwater?

Stormwater is defined as *rain or snow that is not soaked into natural ground*. Stormwater moves across roofs, roads, and parking lots picking up dust, dirt, litter, automobile fluids (gasoline, motor oil, antifreeze), salt, and air pollutants that fall as tiny particles. Stormwater is dirty and it tends to stay dirty.

For many years, people have designed roads and parking lots that get rid of stormwater as quickly as possible. The water is channeled to stormdrains or catch-basins. From there, the dirty water is often piped to a stream or an impoundment. Streams are effective at taking stormwater away from the site of origin, but streams are not effective at cleaning dirty water. Streams simply transfer dirty water from one place to a different place downstream.



Rain Garden
Photo from www.extension.unh.edu

An alternative to moving stormwater “away” is to treat it on-site. One option is to build roofs and roads that drain stormwater to a vegetated area where water can soak into the ground, such as a rain garden. Rain gardens have deep, porous soils and plants that tolerate large pulses of water and periods of drought.

(For more information on rain gardens, visit <http://des.nh.gov/organization/divisions/water/stormwater/documents/rain-garden-fs.pdf>)

Another option is to build porous hard surfaces. Where pavement isn’t absolutely required, gravel is an option. Gravel isn’t as good at capturing rain water as a forest, but at least some rain water will soak in. Pervious pavement and concrete are high-tech alternatives that allow rainwater to pass through and soak into the ground. (For local sites, visit the far parking lot at Lowe’s in Greenland, the Great Bay Discovery Center in Greenland, or the UNH Stormwater Center.)

Stormdrains and catchbasins are almost everywhere that people are. Fixing our stormwater problems will take time and money. Regardless, all of us can take simple, positive steps today that help reduce the amount of dirty water going into streams and do not require any political machinery or big money:

- When needed, wash your car on lawn, not in the driveway or on the street.
- Always pick up after your dog, even on lawn, and discard the waste in the trash.
- Dispose of car oil properly. Never dump oil or other waste onto the street or down a stormdrain.
- Keep your vehicle maintained and repair oil leaks. If you see an oil spot on the driveway, soak up what you can with a rag or kitty litter and put it in the trash.

- Instead of washing your driveway with a hose, sweep your driveway and discard the dirt in the trash or on a wooded part of your property.
- Avoid using salt on your driveway and walkways. Use clean sand for traction if necessary.

Every one shares the same water. Keeping clean water clean is easier and less costly than cleaning up dirty water. Remember, no matter where you are, you're always downstream or upstream of someone else's activities. There is no "away" where pollution is the issue.

What Good Is Wood? Something's Fishy Here...



Instream wood. Photo by Jim MacCartney

In addition to clean, cold water, one of the qualities that trout need in a habitat is instream complexity. Trees that have fallen into streams help to increase that complexity. Branches help to slow the water, provide safe resting places when the current is fast, and help to hide the fish from predators. Aquatic insects make use of the branches as places to feed and lay eggs, and these insects serve as important food sources for the fish. Branches in the stream also help to create small erosional pockets in the stream bed where fish can lay their eggs.

Trout Unlimited has long been an advocate for improving fish habitat. This fall, local members will be working on a project that they hope will improve habitat for trout and other cold water fish on Rum Brook in Epping.

A tributary of the Lamprey River, Rum Brook was chosen for the project for several reasons: it is a small stream that is too shallow and narrow for canoeing, it has wild trout, the surrounding conservation land is of high ecological quality, but the stream itself has very little wood. The project will entail moving several downed trees into the water and securing them naturally along the shore to resist strong flood waters. No cross-channel placements are planned. Even though the work mimics natural processes, a wetlands permit is required from the NH Dept. of Environmental Services and it will be secured before any work is undertaken.

If the project goes well, a similar project in Deerfield is planned for next spring. Stay tuned for more details on these exciting projects.

What Is a Wild and Scenic River?

As you drive across the Lamprey River in Epping, Lee, Durham, and Newmarket, you might have seen the sign indicating the Lamprey River is Wild and Scenic. You might have seen the sign so often that you don't give it a second thought; don't. The Lamprey might flow through familiar territory, but the river is far from ordinary.



The national Wild and Scenic Rivers Act (Public Law 90-542) was created by the US Congress and signed into law in 1968. Its purpose was to ensure free-flowing conditions and preserve the outstanding natural, cultural, and recreational values of certain rivers for the enjoyment of present and future generations. Most of the rivers in the National Wild and Scenic Rivers System flow through federally-owned land and are managed by the federal agency that manages the land. In contrast, many of the designated rivers in the East flow through private lands. These rivers, including the Lamprey, are called *Partnership Wild and Scenic Rivers*, because their management occurs through a partnership of the National Park Service and a local river management advisory committee. Both the advisory committee and the National Park Service have non-regulatory roles.

In order to become designated as a Wild and Scenic River, towns and citizens along the river must work hard to document why the river is outstanding and create a comprehensive plan to manage the river. In addition, once these formidable tasks are accomplished and the National Park Service indicates its support of designation, the US Congress must approve a bill to include the river into the roster of designated rivers. Given today's political climate, that alone is rare!

Of all the rivers in the US and Puerto Rico, only 203 rivers or river segments are designated as Wild and Scenic. A 23.5 mile section of the Lamprey River is designated as a Wild and Scenic River, from the former Bunker Pond Dam in Epping to the confluence with the Piscassic River in Newmarket. This section was found to have "outstandingly remarkable" ecology, archaeology, and migratory fisheries values. Wild and Scenic designation puts the lower Lamprey River into a very special class: less than one quarter of one percent (.25%).

The next time you see one of the Wild and Scenic signs as you cross the river, remember that the Lamprey is a very special river and that you are very lucky to live so close to this wonderful resource.

Mystery Clumps

What's lumpy and gelatinous, clings to submerged tree limbs, is not found during frog breeding season, and looks quite bizarre?



Photo by Jean Eno.

That question was posed to us in late August by a canoeist who was enjoying an otherwise normal day paddling along the Lamprey. We thought the clumps might be infertile pickerel frog eggs, but as it turns out, they are freshwater bryozoans.

According to NHDES, these animals are colonial invertebrates, sort of like soft-bodied corals. They are more commonly found in salt water, but some live in fresh water. They are filter-feeders. They are not regarded as a pest species, but if you see them, please let us know.

*We are never far from the lilt and swirl of living water. Whether to fish or swim or paddle, of only to stand and gaze, to glance as we cross a bridge, all of us are drawn to rivers, all of us happily submit to their spell. We need their familiar mystery. We need their fluent lives interflowing with our own. —
(John Daniel, Oregon Rivers)*

