For Your Lake's Sake

by Brady Slater



Covet clear blue waters?

Lakehome owners in Maine & Wisconsin show to get it – & keep it

t's circular, 8 or 10 inches in diameter. It's as flat as a communion wafer.

It's painted in alternate black-and-white like the floor tiles of your favorite retro diner.

It's called a Secchi disk and this 142-year-old Italian measuring invention is among the most talked-about tools on American lakes. Maybe even ahead of depth finders and trolling motors.

"You [lower it into the lake and] look at it until you lose sight of the disc," said Maggie Shannon, a resident of Maine's Wilson Lake area. "That's your water-clarity reading. We've got a clear lake – 51/2 meters [18 feet]. That's average for Maine; we're so proud of our lakes."

Because so many lakehome owners – and the lake associations they belong to – covet clear water, many shorelines are often being *naturalized* these days. Manicured beachfronts and groomed lawns that run to the water are giving way to beautiful, bushy, verdant lakeshores.

What does it mean to naturalize your shoreline, and what are the rewards? The list begins with:

* the return of native trees, plants, reeds and lily pads;

the introduction of intimate, meandering pathways through

* the revival of driftwood and recovery of fishing holes that sprout around it;

the yard to the lake;

* a healthier, clearer lake, because the natural shoreline filters run-off that may contain sediments and algae-encouraging phosphorous; * pesky, lawn-loving geese go elsewhere, fearing that your natural shoreline might harbor predators.

The Lakescaping Movement

How is it that these lush, natural lakeshores are becoming more common?

It's not quite a revolution, but shoreland stewardship is at least a

burgeoning movement. It started in earnest in Minnesota, Land of 10,000 Lakes, and was dubbed by a Minnesota conservationist as "lakescaping." Other phrases used to describe the practice of caring for the shoreland are "naturalizing the shoreline," "shoreline preservation" and "shoreline restoration."

Whatever you call it, the idea is now spreading like the algae blooms it seeks to combat. In Maine, the movement was kicked into high gear by its LakeSmart program – a 6-year-old, non-punitive endeavor that encourages alternative lakeshore landscaping by rewarding interested lakehome owners.

And around one lake in Wisconsin's Bayfield County, land owners are using a \$100,000 grant to cultivate a more ecologically sound shoreline around their precious lake – one cabin property at a time.

Grassroots Approach

Commonly, the advocates of shoreland stewardship seem less inclined to march down the preachy path favored by some of today's ardent environmentalists.

Instead, you're likely to see a grassroots approach by lake association members or individual lakehome owners who take the initiative, opening the door for environmental educators to assess properties and recommend changes.

It's a soft sell, but a convincing one – especially when the neighbors gather together because they wish to improve lake quality.

LakeSmart in Maine

In Maine, the state's LakeSmart program has become immensely popular. "When we put it out there we reacted to areas that were interested – until it snowballed," said Christine Smith, Maine's one-time lakes education coordinator and the author of the LakeSmart initiative.

Now, LakeSmart has a pent-up demand of at least 10 lakes that are waiting. "We've created an applica-







Above: A LakeSmart award-winning cabin on Great Pond in Belgrade, Maine.

Middle: A cabin owner on Wisconsin's Bony Lake learns what's needed to naturalize the shoreline.

Bottom: Also on Bony Lake, a lakehome owner's efforts at returning the lakeshore to a natural state.





tion process to make sure they're committed to promoting it and working as a partner, as opposed to the Department of Environmental Protection [DEP] doing it all. It has to be a grassroots effort." Smith says.

Wilson Lake's Maggie Shannon and her husband, Roger, are among the state's 117 property owners to earn LakeSmart awards – two LakeSmart signs to display on the front and rear of the property, a plaque for their camp and their names published in a congratulatory newspaper ad. The signs feature a drop of water framing a cycle-of-life motif and read: "Living Lightly on the Land for Our Lake's Sake." The signs are visible by boaters as well as overland travelers.

"People don't generally realize lakes are fragile natural resources," Maggie said. "They look at them as eternal and have no idea how vulnerable they are to human activities.

Rather than punishment, the Maine DEP chose a rewards program for people who think of a lake as a commons."

Maggie called it "old-fashioned New England green thinking" and, on Wilson Lake, it's working. Bill LaFlamme, the state's shoreland zoning coordinator, reported 17 percent of the lake's 1,600 properties as being groomed toward Lake-Smart compliance.

"The theory we're working on is if at least 15 percent take part," LaFlamme said, "the remaining 85 percent will follow suit over time." The conservation – or "green" – tradition among Mainers works in LakeSmart's favor. The state put shoreland zoning laws on its books as far back as 1970 – an indication of the state's progressive impulses. Popular longtime Senator George J. Mitchell grew up on the once-fetid Kennebec River, an experience that stirred him to become an enthusiastic advocate for water quality throughout his career.

Today, law-enforcement resources are spread too thin to monitor water quality. Enter the 6-year-old LakeSmart program. It's right on time in today's environmentally conscious climate. The program educates property owners about watersheds — the fact that their lakes exist at the bottoms of bowls, and that because of gravity their lakes receive rainwater runoff — and its sometimes high phosphorous content. That phosphorous content, of course, is the stuff that feeds algae blooms.

"The genesis of the program was we were seeing suburban land-scaping moving to our lakes and we needed to change the ethic of people coming to Maine and bringing big lawns to lakes," Smith said. "There's still a desire to do that, but we want to reward people who have nice vegetative buffers.

"In a nutshell we're trying to slow the flow of runoff over people's properties into lakes. We do not want nutrients going into lakes and feeding the algae."

Bony Lake. Wisconsin

Wisconsin doesn't want that either. There, a Secchi disk reading of Bayfield Bounty's Bony Lake produces a depth of 24 feet.

"That quality of water is still unique," said Carol LeBreck, a property owner and writer for a 3-year Wisconsin Department of Natural Resources grant worth \$100,000 that may help establish Bony Lake as a showpiece for shoreland stewardship. "We'd like to be able to keep it that way, even at a time when lakes nationwide are being degraded by all kinds of forces, not the least of which is greater development."

LeBreck started visiting Bony

Lake's modest but nonetheless beautiful 191 acres as a child in the 1940s. She recalls more low-impact cabins and resorts than year-round homes. It was more common to see loosely defined yards with pine needles scattered about than to see neat lawns of lush green grass. There was less boat-induced wave action pounding on the shorelines. She even recalls the sedate demeanor of the once-common blue crawfish species – as opposed to the more prominent hyperactive rusty crawfish species that now behaves like it owns the lake.

Clearly, times change and LeBreck believes Bony Lake can adjust with the times. "There have been lots of changes," she said, but added that there's a core of people who have owned property on the lake a long time and are deeply invested in its future. She said about 50 percent of property owners were on-board with shoreland stewardship prior to the writing of the grant, and estimates 165 acres of land are tied into those people. She hopes that the grant will help the property owners establish 25 to 30 different kinds of conservation areas.

"We're thinking lake-wide restoration, not just shoreline buffers, LeBreck said. "If we restore properties we can remake an impact on habitat."

The Bony Lake project asks lakehome owners to take steps ranging from easy to more work-intensive. An easy step: Cabin owners turn off gaspowered brush cutters and let the native shoreline vegetation grow.

Ideas that involve some sweat equity: Establish rain gardens that collect storm-water, do strategic tree drops that will reintroduce fish habitat and install bio-logs to stem wave-based erosion.

What is a bio-log? It's a natural fiber log made of biodegradable coconut fiber and netting, and it is used to stabilize slopes and minimize bank erosion. Bio-logs blend into the shoreline and effectively trap and retain sediment. You can plant native seedlings right in these fiber logs, and they retain moisture and provide stability so plants can take root, grow and spread. Bio-logs are placed at the



A Natural Shoreline – What Can You Do?

ne of the tenets of shoreland stewardship is the reintroduction of native species to serve as a vegetative buffer between land and water. This buffer is referred to as "the forest sponge" by one source.

"Every time it rains, water washes over the landscape, picking up soil nutrients and pollutants, carrying them to the lowest point – the lake," Maine's Maggie Shannon says. "Anything a person can do to slow the flow of rainwater allows it to percolate in the soil and be absorbed. That's why natural lakes are sparkling and pristine."

Nothing facilitates that percolating process better than native species. According to the University of Minnesota Extension Service: "Native plants are those that evolved in your area over several thousand years prior to European settlement. These plants are adapted to the local environment, and are best for the overall ecosystem."

The following is a list of helpful tips you can use to reestablish the forest sponge of native species along your shoreline:

- * LIMIT CUTTING, PLUCKING, PRUNING, TRIMMING, MANICURING AND MOWING. "If you let things go, the natives will come back," said Wisconsin's Carol LeBreck. "You'd be surprised. You'll see something that looks like orchids and say to yourself, 'Oh my, I never had those before.'"
- * DROP THE RAKE. What you thought was unsightly debris, those leaves and twigs in various stages of decomposition, is called "duff" and it makes up an important layer of your forest sponge.
- * PLANTING NEW. To give your shoreline growth a boost, you may want to plant native seedlings. How do you figure out what's native to your area? Try your local extension office, state resources department or your county biological survey. A county master gardener may be helpful. Before planting, you may need to obtain a permit. Again, check with your state resources department.
- * PLANTING: THINK BIG ... & SMALL. If you decide to plant native species, include a variety of trees, as well as saplings, shrubs, bushes and smaller plants. Big: The bigger trees' root systems are as vast in the soil as the crown is up top. Those roots hold the soil together and prevent erosion. Small: The smaller the plant, the more it protects soil immediately around it, stopping raindrop erosion in the topsoil around the plant.
- * LEAVE THE DRIFTWOOD. One of the first things property owners do is drag all the dead trees and branches out of the water in an effort to neaten up the place. But consider letting the downed trees lie. It's an integral piece of the ecosystem, providing habitat for fish and wildlife.
- * CREATE WALKING PATHS. Instead of swaths to the lake, Maine conservationists recommend 6-foot-wide paths that meander from the home to the shoreline. You don't want a straight shot for obvious runoff reasons. You do want to add a layer of mulch to these paths (4 inches is recommended).

foot of banked slopes or in the water, molded to follow the shoreline, and then anchored in place by wooden stakes or rocks.

The Bony Lake project may, indeed, become a model of shoreland conservation. The grant specifies that in the future the lake area will host educational workshops.

The Future

Of course, neither \$100,000 nor the patience of stretched-thin conservationists lasts forever. For Bony Lake and those Maine lakes, property owners will bear the load to bring about long-term change. Sure, college-age conservationists looking for out-of-lab credit will put in their volunteer time. And, yes, there's always a corps of some kind to perform a service project of some kind or another. But the ongoing responsibility for shoreland stewardship will reside with the lakehome and cabin owners.

Nobody ever said being a lakehome owner was easy – just rewarding. Being a shoreland steward is even less so on the first account – and maybe even more so on the second.

Take it from Maggie Shannon, whose verbal tour of her property paints a mind's eye picture anybody could get lost in: "The property we live in was built by a young couple who met as summer residents and fell in love. They built the smallest footprint they could, an A-frame. You can't see the property from the lake unless the glass reflects the light. We have a sightline from the deck to the lake and a tiny narrow mulched path through the hemlock.

"I feel good about it."

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