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PLEASANT | PARKER *Lake | Pond* ASSOCIATION

DECEMBER 2025 NEWSLETTER

Dear Members of the Pleasant Lake/Parker Pond Association (PL/PPA) and others who enjoy our lakes:

As 2025 closes and our lake settles into its annual slumber, I want to reflect on a successful and productive year for our Association and our beautiful community.

First and foremost, thank you. Our work isn't possible without your incredible support. Thank you to our dedicated Board members and committed volunteers for their countless hours. Thank you also to every community member who helped—whether you served as a volunteer Courtesy Boat Inspector, performed water quality and invasive plant patrol surveys, or renewed your membership. Every action helps fulfill our mission; your commitment is our power source.

At our Annual Meeting in July, we heard a clear message: you want more practical ways to help protect the health and pristine water quality of Pleasant Lake and Parker Pond. We agree! The future depends on the daily choices we all make. Please turn to our Seasonal Lake Stewardship Calendar inside. It's filled with easy-to-follow best practices you can implement each season. Lake stewardship is a year-round commitment, not just a summer activity!

Our focus for 2026 remains on education, engagement, and collaboration. We'll continue to work with our local partners to leverage resources and coordinate water protection efforts. Most importantly, we want to cultivate the next generation of lake stewards! Engaging youth now raises the future caretakers and champions who will safeguard this beautiful lake for generations to come.

If you have questions, ideas for new activities, concerns, or anything else to communicate, please email me at plppassoc@gmail.com.

I wish you and your families a joyful holiday season and a healthy, happy new year. We look forward to seeing you in 2026!

Benaé Francis,
*President, Pleasant Lake/
Parker Pond Association*



Volunteer Power: Expanding Our Defense Against Milfoil and Other Invasive Species

Pleasant Lake and Parker Pond face a growing threat from aquatic invasive species (AIS), like milfoil, which are often introduced through fragments carried on boats and trailers. To strengthen our defense during peak summer times, we launched our first Courtesy Boat Inspector (CBI) volunteer pilot program! We were thrilled to train twelve dedicated volunteers, ranging in age from 14 to 80: Marygrace, Benaé, Gabe, Connie, Harry, Jim, Marge, Miriam, Holly, Nora, Babara, and Jennifer. A huge thank you to these community members who raised their hands and invested the time to be trained, ensuring we were ready to defend our waters.



YOUR CONTINUED SUPPORT

Your support makes it possible for us to continue to do everything we can to keep our lakes healthy and clean for all to enjoy. You can donate:

- By check (Pleasant Lake/ Parker Pond Association, Post Office Box 419, Casco, ME 04015)
- Online (debit, credit or PayPal)
- Or a Qualified Charitable Distribution

Visit here for full details:
<https://plppa.org/contribute/>

Or scan this QR code to contribute online and for other contribution options





Warden Watch: Strengthening Our Partnership

We extend our sincere thanks to the Maine Warden Service for stepping up their presence on Pleasant Lake and Parker Pond this summer. We were especially grateful to welcome **Game Warden Mike Pierre** to our Annual Meeting in July! Thank you also to **Lieutenant Jason Luce** in Gray for making this happen. It was a great opportunity for our community to learn how conservation laws are enforced in our area and how we can all play a critical role in protecting our lakes. We look forward to continuing this vital partnership in 2026.



Investing in Tomorrow: Cultivating Our Next Generation of Lake Stewards

Engaging the next generation in water quality stewardship is the single most critical investment in the future health of our lake and surrounding watershed. By starting youth-focused programs, our Association addresses the urgent need to transfer vital knowledge and instill a deep environmental ethic in those who will inherit this resource. These hands-on programs transform abstract conservation concepts, like managing pollution and invasive species, into real-world action and memorable discovery.

Our ultimate goal is to build a dedicated pipeline of future leaders who possess both the scientific understanding and the passion required to defend the lake ecosystem. These programs ensure the commitment to preserving our lake's pristine water quality endures for decades to come. We are cultivating the next generation of dedicated caretakers!

Here are three potential ideas for fun, hands-on experiences:

- **Pontoon Classroom:** Utilize a boat to conduct floating field trips and introduce basic water quality monitoring. Kids use a Secchi disc to measure the water's transparency, directly linking their efforts to real lake data and helping them understand the impact of algae and sediment on clarity.
- **Watershed Investigators:** Explore how human activity affects the lake using a hands-on watershed model. Children "create" rain on a model to observe how everyday materials like fertilizers and litter wash directly from the land into the water, demonstrating the concept of non-point source pollution.
- **Junior Loon Patrol:** Become a certified Loon Monitor by learning the four distinct loon calls and practicing respectful observation techniques. This engaging program teaches young explorers how human actions impact these iconic birds, empowering them to actively protect loons and their vulnerable nesting sites.

And this is where we need your input. We are seeking feedback and fresh ideas from parents, grandparents, and all community members. What would make these programs most impactful? What activities would excite the kids in your lives? If you have ideas for new activities or programs, email us at plppassoc@gmail.com!

Together, we can build a strong foundation for the future of our lake!



IMPORTANT: Updated Life Jacket Law

Effective January 1, 2026, Maine has updated the law to require **children under 13 years** old to wear a United States Coast Guard-approved life jacket while on a recreational watercraft that is underway. This bill, which aligns with federal requirements, extends the previous law that mandated life jackets for children 10 years old and younger.



Seasonal Lake Stewardship Calendar

Lake stewardship is often mistakenly viewed as a task reserved solely for the warm, sunny months of summer—a time for swimming, boating, and recreational enjoyment. However, maintaining the health, beauty, and ecological balance of our precious lakes is, in reality, a dynamic, year-round commitment. The truth is, every season presents unique challenges, opportunities, and essential tasks for effective lake management. The actions we take (or neglect) in the quiet months of fall, winter, and spring have a profound and lasting impact on the lake's condition when summer arrives. This Seasonal Lake Stewardship Calendar serves as your guide, breaking down season-specific activities that ensure the long-term vitality of lakes, ponds, and rivers. By embracing this continuous cycle of care—from planning and monitoring in the cooler months to proactive management in the growing season—we can all be better stewards of our water resources.

ACTION

WHY IT'S CRITICAL FOR WATER QUALITY

ACTION	WHY IT'S CRITICAL FOR WATER QUALITY
WINTER 	Choose the Right Salt for Lake-Friendly De-Icing <i>Protects Aquatic Life:</i> Use de-icing salts sparingly, and shovel thoroughly before applying. Consider using "smart" salts (like calcium chloride) which work at lower temperatures and are generally less harmful than rock salt.
	Clean Out and Maintain Stormwater Drains <i>Maximizes Drainage:</i> If your property or nearby association road has culverts or small drains, ensure they are free of debris (ice chunks, leaves, snow build-up). This prevents water from backing up, freezing, and then causing excessive erosion when it finally thaws and breaks through.
	Choose Safe Ice Access Points <i>Prevents Sediment Disturbance:</i> If accessing the ice for recreation, use established access points. Avoid creating new ruts or disturbing the shoreline, which makes it highly susceptible to erosion during spring thaw.
SPRING (After snow melts) 	Stabilize Thawed Banks & Shorelines <i>Prevents Erosion:</i> Inspect your property for areas where snowmelt has created small gullies. Place straw wattles, rock bags, or temporary barriers to trap sediment before it enters the lake.
	Direct Rainwater to Green Space <i>Manages Runoff.</i> This slows down runoff from spring rains, allowing soil and vegetation to filter out sediment and pollutants like oil before the water reaches the lake.
	Inspect Your Septic System <i>Prevents Contamination:</i> Spring thaw and high groundwater can stress septic systems. Ensure surface water is diverted away from the drain field, and schedule a pump/inspection if it's been over three years.
SUMMER 	Commit to No-Mow Zones <i>Maximizes Filtration.</i> Letting grass grow tall along the shoreline creates a vital physical barrier that filters pollutants and absorbs nutrients during the high-use season.
	Minimize Fertilizer/Chemical Use <i>Eliminates Pollutants.</i> Fertilizers contain phosphorus and nitrogen, the main nutrients that cause disruptive and potentially toxic algal growth during warm summer months.
	Clean, Drain, and Dry Your Watercraft <i>Prevents Invasive Species.</i> Before launching or moving your boat/kayak, meticulously clean all visible plant fragments and drain all bilges/live wells. Invasive species like Milfoil can destroy native habitat and clarity.
FALL (Before ground freeze) 	Plant Fall Cover Crops and Native Plants <i>Controls Erosion.</i> Planting in the fall is great because cool air and warm soil encourage roots to grow strong before winter. Native root systems hold the soil firmly in place, preventing shoreline collapse and keeping nutrient-rich sediment out of the water before winter freezing and thawing cycles.
	Inspect Driveways and Access Points <i>Manages Runoff.</i> Identify gravel or dirt surfaces that might be eroding. Add fresh stone or apply erosion control measures now, before the ground freezes, to stabilize them for the winter.
	Conduct a Final Propane/Gas Inspection <i>Prevents Hazardous Spills.</i> As you store equipment like grills, boats, and yard tools, check all fuel lines, hoses, and gas cans for cracks or leaks. Properly empty and store equipment fuel in secure, dry areas to prevent gasoline or oil spills that would contaminate the watershed.

The Next Wave of Defense: How Artificial Intelligence is Protecting Our Waters

While our daily efforts like planting buffers and managing runoff remain foundational, the future of protecting our lake's pristine water quality is rapidly being shaped by innovative technology. Artificial Intelligence (AI) and machine learning are emerging as powerful new tools that can move beyond simple observation, allowing us to predict, prevent, and respond to threats like harmful algae blooms and invasive species with unprecedented speed and accuracy.

Here's how conservation experts worldwide are turning AI possibilities into proven reality:

- **Continuous Water Quality Monitoring:** AI algorithms instantly analyze continuous data from lake sensors (temperature, pH, dissolved oxygen) to identify subtle patterns, trends, or sudden anomalies that signal pollution, contamination, or water quality stress faster than manual testing.
- **Advanced Algae and Contaminant Forecasting:** Machine learning models analyze complex data—including satellite imagery, weather patterns, and historical nutrient levels—to accurately predict the likelihood and severity of Harmful Algal Blooms (HABs) weeks in advance, enabling proactive warnings and prevention measures.
- **AI-Powered Invasive Species Mapping:** Using Computer Vision (deep learning) on aerial and satellite imagery, AI can be trained to instantly recognize, count, and map the precise location of invasive species infestations (like milfoil or water chestnut), providing critical GPS coordinates for targeted removal.
- **Predictive Risk Mapping for Prevention:** By analyzing "Big Data" (historical invasion records, human-use patterns, and environmental factors), machine learning models determine which un-invaded areas are at the highest risk of future invasion, allowing managers to prioritize surveillance and preventive actions.



BUILDING OUR DIGITAL DEFENSE: Maine is taking crucial first steps to integrate these 'smart' concepts into how we monitor and protect our waters.

Maine's primary lake protection strategies are robustly managed by the Department of Environmental Protection (DEP). Historically, these vital efforts have relied heavily on proven, traditional methods, including physical water sampling and the essential volunteer monitoring coordinated by groups like the Lake Stewards of Maine (LSM). Building upon this solid foundation, Maine is now actively benefiting from the rapid development of advanced data analytics and machine learning applications. These powerful tools interpret decades of collected data alongside real-time satellite imagery. This high-tech support allows our partners to maximize their surveillance capabilities, predict emerging threats like harmful algae blooms weeks before they strike, and ultimately manage the health of our thousands of beautiful waters as efficiently and proactively as possible. This shift optimizes our resources and elevates our stewardship, ensuring we use cutting-edge science to defend our waters.

Here's how Maine is already applying advanced data concepts to maximize surveillance and prediction:

- **Lake Vulnerability Modeling:** The Maine Department of Environmental Protection (DEP) uses statistical analysis and Geographic Information System (GIS) data to create a Lake Vulnerability Analysis and Predictive Model. This model assesses a lake's risk of colonization by invasive aquatic plants (like Variable-leaf Milfoil or European Naiad) based on factors like public access, geography, and water chemistry.
- **Data-Driven Prioritization:** This vulnerability score directly informs strategic decision-making by the DEP and local partners. The model helps them prioritize which lakes require the most rigorous manual surveillance, early detection efforts, and preemptive management spending. By guiding inspectors and conservation resources toward the highest-risk areas, the state ensures the most effective defense against new infestations.
- **Digitizing Field Reports:** The DEP and Lake Stewards of Maine (LSM) utilize modern mobile tools like ArcGIS Hub and Survey123 apps for real-time reporting of boat inspections and plant sightings. This system immediately digitizes critical field data, including GPS coordinates and photos. This consistent, structured data is the essential "fuel" needed to eventually train sophisticated AI detection models for faster, automated environmental monitoring.

The next time you hear about AI, remember that its power is already transforming how we predict emerging threats and fight invasives worldwide. We are excited about how these smart systems can ultimately help us keep Pleasant Lake and Parker Pond water healthy for generations to come!