

Rain Barrel Guide

HOW TO CARE FOR A RAIN BARREL



Rice Creek Watershed District

www.ricecreek.org

Content

01 TYPES OF RAIN BARRELS

02 PREPARING FOR SPRING

03 USING YOUR RAIN BARREL

04 WINTERIZING YOUR RAIN BARREL

05 MAINTENANCE & LONGEVITY TIPS

Rain Barrels

There are many kinds of rain barrels from plastic, wooden, repurposed food-grade barrels, and decorative models. Consider capacity (typically 50–100 gallons), material durability, and additional features like built-in spigots, overflow valves, or connections for soaker hoses. If you plan to integrate the barrel with a drip irrigation system, look for models with hose-compatible spigots and multiple ports.



Photo Credit:
Blue Barrel Systems



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Home&Garden



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Walking Construction Recipes



01

TYPES OF RAIN BARRELS

Choosing Between Plastic and Wooden Barrels:

- Plastic Barrels:
 - Pros: Lightweight, affordable, easy to clean, and resistant to rot.
 - Cons: Less aesthetically pleasing to some; may degrade over time due to UV exposure.
- Wooden Barrels:
 - Pros: Offer a rustic, natural appearance; provide better insulation, helping to maintain water temps and reduce algae.
 - Cons: Heavier, more expensive, require regular maintenance to prevent decay, and can be hard to clean.

Hose and Irrigation Connections:

Most rain barrels come equipped with a spigot for hose attachment, allowing for easy watering of gardens and lawns. Some models offer additional features like overflow outlets and screens to prevent debris entry.

For cold climates like Minnesota, opt for a UV-resistant and crack-resistant plastic barrel to withstand seasonal changes



02

PREPARING YOUR RAIN BARREL FOR SPRING

▶▶ Inspect for Damage

- Check for cracks or warping in plastic barrels and wood splitting or rot in wooden barrels.
- Inspect gaskets, spigots, and hoses for wear or leaks. Replace worn-out parts as needed.
- If you stored your rain barrel outdoors, check for pests like mice or insects that may have nested inside.

▶▶ Clean **Again**

▶▶ Reassemble Components

- Reattach the spigot, overflow hose, mesh screen, and any diverter systems securely.
- Ensure the mesh screen is intact to prevent mosquitoes and debris from entering.
- Tighten all connections and replace any worn-out washers or fittings.

▶▶ **Reconnect** to Downspout

Test for Leaks

- Fill your rain barrel partially with water and check for leaks around the spigot, seams, and hose connections.
- Tighten or reseal any leaking areas with waterproof sealant or rubber gaskets.



USING YOUR RAIN BARREL

Keep It Clean and Clear

- Check and clean the screen/filter regularly to remove leaves, pollen, and debris. This prevents clogging and keeps your water supply fresh.
- If your barrel doesn't have a mesh screen, consider adding one to keep insects and debris out.
- Every few weeks, inspect the spigot and overflow hose for blockages.

Prevent Mosquito Breeding

- Keep the lid and screen secure to block mosquitoes from laying eggs.
- If you notice mosquito larvae in your barrel, use Mosquito Dunks (*Bacillus thuringiensis israelensis* – BTI), a safe, natural treatment that kills larvae but is harmless to plants, pets, and wildlife.

Manage Water Quality

- Keep your rain barrel in a shaded area to prevent algae growth.
- If using water for edible plants, avoid allowing it to stagnate too long —empty and refill the barrel every few weeks if rain is infrequent.
- Direct overflow to a rain garden or additional barrels to maximize collection capacity.

Prepare for Heavy Rains

- Check for overflows during storms and ensure the water is properly redirected away from your home's foundation.
- If you expect heavy rainfall, partially empty the barrel ahead of time to create space for new water.

Perform Seasonal Inspections

- Inspect hoses, spigots, and seals for wear and leaks.
- Remove sediment buildup by flushing the barrel once or twice per season.



WINTERIZING YOUR RAIN BARREL

▶▶ Drain Completely

- Before freezing temperatures arrive, empty all water from rain barrel. Open the spigot fully and tip the barrel to remove any remaining water.
- If your barrel has a bottom drain plug, remove it to allow complete drainage.

▶▶ **Disconnect** from Downspout

- Remove the rain barrel from your downspout to prevent ice blockages.
- Attach a downspout extension to direct rainwater safely away from your home's foundation during winter in place of barrel.

▶▶ Clean Thoroughly

- Before storing, scrub the inside with a mild soap.
- For deeper cleaning, use a diluted bleach solution ($\frac{1}{4}$ cup of bleach per gallon of water) but rinse thoroughly afterward to avoid harming plants when you use the barrel in spring.
- Scrub the screen, spigot, and overflow ports.

▶▶ Store Properly

Ideal Option: Store your barrel indoors in a garage, basement, or shed.

If left outside:

- Turn it upside down to prevent water/snow from collecting inside.
- Secure it with bricks, straps, or bungee cords.
- Cover it with a tarp.

05

MAINTENANCE & LONGEVITY TIPS

Use a First Flush Diverter

- A “first flush diverter” helps prevent debris, bird droppings, and pollutants from your roof from entering the rain barrel. It diverts the first few gallons of rainwater, which often contain the most contaminants, before allowing clean water into your barrel.

Keep It Elevated

- Raising the rain barrel on cinder blocks or a sturdy stand improves water pressure for hose or irrigation use.
- Also helps with drainage and prevents water from pooling around the base, which can attract mosquitoes.

Install an Overflow System

- Attach a hose to the overflow port and direct excess water away from your foundation, garden beds, or to another barrel for added capacity.
- Prevents overflow from washing out soil or creating erosion near your home.

Prevent Mosquito Breeding

- Use a fine mesh screen to cover all openings to keep mosquitoes from laying eggs in standing water.
- Add a few drops of vegetable oil or a mosquito dunk (safe for plants and wildlife) to the water surface to kill larvae.

Reduce Algae Growth

- Keep the barrel out of direct sunlight if possible, or use a dark-colored, opaque barrel to block light and discourage algae growth.
- If algae do develop, scrub the inside with a solution of water and hydrogen peroxide or a 10% bleach solution before rinsing thoroughly.

Winterize Early & Avoid Freezing Damage

- In Minnesota, freezing temperatures can crack plastic barrels. Disconnect the barrel before the first freeze and ensure all water is fully drained.
- Store indoors or upside down outside, secured against wind.

Use the Water Efficiently

- Connect the barrel to a soaker hose for slow, steady watering of gardens.

Collect More Rainwater with Multiple Barrels

- Link multiple barrels together using PVC pipes or hoses to increase capacity. This is especially useful in areas with frequent storms.

Use Food-Grade Barrels

- If repurposing a barrel, ensure it was previously used for food storage and not chemicals or hazardous materials.
- Plastic barrels marked with HDPE (#2 plastic) are the safest option.



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Photo Credit: HGTV