



Tips for Removing Water Stains from Wood

by
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Please read the disclaimer at the end of this article

Wood furniture is usually easy to maintain through dusting and polishing. However accidents such as water stains will occur. The term “water stain” is misleading in that any liquid, moisture, or even semi-liquid compounds can cause these stains. Therefore it is important to understand what caused the stain in the first place, what type of stain it is, and what finish is used on the furniture. There are two major types of water stains:

1. light or white water stains, and
2. dark water stains.

White water stains

Water stains can occur on both finished and unfinished wood. White water stains are the most common stains encountered and are usually restricted to finished wood such as coffee tables, end tables and dining room tables. Many people believe that when these stains occur that irreparable damage has been done to their furniture and that the piece would have to be refinished. Usually this is not the case. These stains are often caused by water or moisture standing on the furniture and then “leaking” into the finish. For example an ice cold drink in a glass or can will cause moisture to condense on the outside of the glass/can and drip down onto the top of the furniture. As the water sits on the furniture, it seeps into the finish and causes a white water stain.

These stains become even more common problem in finishes that have aged and started to break down from wear and sun. As long as the finish maintains its integrity, water can’t get through it to damage the finish or the wood underneath. However keep in mind that no finish is waterproof.

Milky white water marks are caused by water penetrating the finish changing its transparency. They are always in the finish itself. The water causes minuscule fractures that prevent you from seeing through. It is much like solid ice that is transparent in relation to cracked ice that has voids and is opaque.

It has been argued that the milky white water marks are due to water trapped in the damaged finish. This is true only to the degree that the damage is very recent to where the water has not yet dried. The cracks caused in the finish and their appearance, however, remain.

Paste wax or liquid furniture polish that is on top of the finish assists the finish in repelling water. They never get water rings, since these items do not turn white with water.

It is always best to avoid these stains by using coasters, can huggies, and other such items that will prevent moisture or water from getting onto the top of the furniture. These stains are not restricted to cold drinks. Even hot drinks, pizza boxes, or warm serving dishes can cause water stains. Regardless of how water or moisture gets on the furniture, quick action will either prevent water marks or reduce their severity.

When trying to remove any stain, it is always best to start with the simplest and least invasive process first and then work your way through a series of solutions before taking on any invasive processes that could leave you worse off. Following are a series of solutions from the least invasive to the most invasive.

1. As soon as the damage occurs, take a soft cloth and softly buff. Don't apply too much pressure as you don't want to work the water into the wood. Use just enough pressure to wipe the stain off the surface.
2. Clean the piece of furniture. Get rid of the old polish and wax. Nothing abrasive should be used to clean wood furniture. (See cleaning section below)
3. Use liquid furniture polish, furniture wax, or even petroleum jelly. Apply it over the affected area, and allow it to sit there for 6-8 hours. Check to see if the stain is still present. If so,, leave the polish/wax on for a few more hours. Check again, and if no more mark remains, wipe clean with a cloth.
4. If minor damage has been done, try buffing the stain with an oil-based furniture polish. Read the label to be sure the product can be used for your particular finish. A cloth diaper works best for polishing wood because it doesn't leave much lint behind. When rubbing the stain, do your best to go with the grain.
5. Use regular mayonnaise to remove the stain.
 - a. Spread two tablespoons of mayonnaise the size of the stain on a dampened paper towel. If the stain is larger, use more mayonaise
 - b. Place the paper towel on the stain, then press lightly, rubbing in a bit.
 - c. Leave the towel on the mark for at least 15 minutes (you can leave it overnight).
 - d. Check under the towel too see the improvement. If there's still sign of the mark, rub more mayo into the wood. Check it again after 15 minutes.
 - e. If the stain is very pronounced, you can add a bit of baking soda to the mayonnaise to make it more effective. The mixture will be grittier, and easier to rub on the surface.

When the stain is completely gone, wipe the wood with a clean paper towel. You can also apply a bit of furniture polish, to remove the mayo's scent.

You can also mix the mayonnaise with cigarette ashes. Apparently this technique relies on the mayonnaise somehow extracting the remaining water from the table as well as light abrasion due to the ashes.

6. Put mineral oil on a soft rag and rub it into the stain. Let it sit overnight and repeat if the stain seems to have diminished.

7. Rub the stain with mineral spirits on a soft cloth if the mineral oil doesn't work. Mineral spirits is a mild solvent that can remove a stain that has penetrated into the wax, but not the finish.

- Wear gloves and apply it in a well-ventilated area. Give it a few minutes to work.
- If the stain is gone but the spot looks dull, rub mineral spirits over the entire surface.
- Put on a new coat of furniture polish.

8. To remove white rings left by wet glasses on wood furniture, mix equal parts vinegar and olive oil and apply it with a soft cloth while moving with the wood grain. Use another clean, soft cloth to shine it up. To get white water rings off leather furniture, dab them with a sponge soaked in full-strength white vinegar.

9. When regular furniture polish doesn't work, try using a dab of car wax. Trace the ring with your finger to apply the wax. Let it dry and buff with a soft cloth.

10. Apply petroleum jelly and let it sit overnight. In the morning, wipe the watermark away with the jelly.

11. On varnished surfaces a simple application of peppermint oil or mild ammonia can easily remove discoloration. Simply dip a flannel cloth in peppermint oil or a mild ammonia solution and rub in a circular motion over the offending stain. When the water mark or stain has been removed, follow with a good cleaning and use of a mild wood moisturizer such as linseed oil.

NOTE: I've also heard of people placing a blotter over the ring and other absorbents such as kitty litter, silica gel and even sawdust.

Slightly Invasive Approaches

12. Use cigarette ash to remove the stain. Here are two ways on how you can use cigarette ash.

- **Disguise It.** If it's a fairly small mark, like one caused by a drop of water when you accidentally nudged a glass with your hand, you can easily disguise it. First, rub the cigarette ash into the mark using your finger. Buff it with furniture polish after. If you don't have furniture polish, some shoe polish will do, but make sure it

suits the dark shade of your table's wood. Soon, the mark will be invisible, cleverly disguised under the polish.

- **Do Away With The Mark.** You can also completely eliminate the stain using cigarette ash. First, make a paste out of olive oil and cigarette ash. Work this slowly into the mark. You'll see the stain coming out as you rub in the paste. This works best if your wood is dark and polished, like mahogany.

13. Make a paste of 1 tablespoon baking soda and 1 teaspoon water. Gently rub the spot in a circular motion until it disappears. Remember not to use too much water.

14. Mix 1 teaspoon salt with a few drops of water to form a paste. Gently rub the paste onto the ring with a soft cloth or sponge and work it over the spot until it's gone. Restore the luster of your wood with furniture polish.

15. Gently rub some non-gel toothpaste on the wood with a soft cloth. Then wipe it off with a damp cloth and let it dry before applying furniture polish.

16. Use a combination of non-gel white toothpaste with baking soda in equal amounts on highly finished wood. Make a paste and apply the mixture on a clean white cloth. Apply in a circular motion to the water stain to gently buff out the stain. Wipe the mixture off the wood and apply furniture polish. This method should only be used on highly finished wood.

17. Mix a 2-1 ratio of baking soda and water in a small metal bowl then proceed to use a rag to gently scrub along the water mark line.

NOTE: When using any of the above techniques be careful not to rub too vigorously or heavy. Although abrasives are used, the object is to remove the stain not the finish.

The Invasive Approaches

Caution: Use the following techniques with great care. You can easily damage the finish or even the wood.

18. Warm the finish slowly with a blow dryer or lamp bulb to dry the moisture. Depending on the kind of finish the heat might help fuse the finish back together, at least to some degree. A goose neck lamp is perfect. Be very careful to apply the heat slowly and not overheat the finish. The finish should not ever become so hot you can't place your hand on it. Remember that slow warmth is better than a blast of too much heat.

19. Hold a hair dryer from about 10 inches away from the stain. Place the setting on low heat.

20. Set an iron on its lowest setting and with **NO** steam. Place a soft piece of material such as a white towel or t-shirt over the stain, and apply the iron to the cloth for a few seconds at a time, taking care to move it around the area regularly so that there's just enough heat to draw out the water from the top layers of wood, but not enough to scold it. Keep doing this until the stains are completely gone. It could take a minute or two to get the stain out completely.

21. The [BBC Online](#) suggests a gentle buffing with a very fine steel wool (of the 0000 variety) and a soft wax polish. Follow with another buffing using kitchen paper.

22. Use some fine grained sandpaper to gently rub around the outer edges of the stained wood. Carefully blend the outer marks of the stain in with the rest of the wood so that no harsh lines remain to offend the eye. Then rub in lemon oil and leave it to dry, before applying several layers of Danish oil to give the complete piece of wood a new lease of life.

23. Dampen a clean cloth with denatured alcohol. Very lightly pass it over the stain. The cloth should be moving, but just skimming the surface. Remember, be very careful with this tactic. Using too much denatured alcohol can damage a water-based or lacquer finish, and dissolve a shellac finish. It's a good idea to use a small amount of alcohol at first, and just keep adding some if needed. Watch closely what happens. If you're not sure whether alcohol is compatible with the finish, try it on a very small area first.

The most dangerous/invasive approaches

24. Use a product containing *oxalic acid*. Oxalic acid is a wood bleach so be aware that once the water mark is removed, you'll probably have to refinish the piece. It is a good idea to test any chemicals on a hidden spot, such as under a table or on the bottom of a chair leg to make sure no more damage will be incurred. If the damage is beyond that which surface cleaning can repair, you can sand the surface of the piece and refinish.

25. We have only read about this method and have not tried it. The following method is dangerous. We do not take any responsibility if you get it wrong! You need methylated spirit, cotton wool and a cigarette lighter. Just dampen the cotton wool with the methylated spirit and hold only in your left hand. Hold the lighter in your right hand. Wipe over the ring mark with the cotton wool, make sure that your hand is well away and flick the lighter on at the edge of the mark. The methylated spirit will light and the mark will disappear. Methylated spirit burns at a very low temperature and does not burn for long. This way you are not disguising the mark, you are removing it. But remember: Only use methylated spirit, make sure you use the smallest amount, if it

burns for more than 3 second then just blow out the clear flame as you would blow out birthday candles and do not set fire to the cotton wool or your fingers. It will hurt!

If all else fails and that pesky stain refuses to budge, you're left with three options: cover it up with strategically placed books or picture frames, refinish the furniture, or chuck it and start shopping for your new coffee table.

A word about commercial stain removers. There are several commercial stain removers that can remove water stains. Some of these work well while others are not even worth the trouble to buy them. One commercial product that seems to work is Liberon Ring Remover. You can check it out at: http://refinishfurniture.com/remove_white_ring.htm.

Dark water stains

Dark stains occur when the water penetrates the finish and goes into the wood, such as a stain on a wood floor where moisture has leached from a planter. In addition to a dark stain, water damage to the wood could also result in raised grain, peeled or lifted veneer, warpage, splits, joint or glue failure, and peeling of the finish.

Dark stains require a bit more effort to remove because they are a deeper stain and are in the wood as opposed to the finish, and because the process is invasive to the wood. There are essentially two methods for dark water stain removal.

Using Sandpaper

1. Remove the finish over the stain gently with sandpaper, moving with the grain of the wood.
 - o Use #100-grit sandpaper, and then feather the edges with #150-grit sandpaper.
2. Sand the stain with #150-grit sandpaper, now that you have removed the finish. Feather the edges around the stained area with #0000 steel wool.
3. Use tack cloth (lint-free cloth) to remove sanding dust.
4. Put on several light coats of varnish to match the original finish.
5. Feather the edges of the new varnish with #0000 steel wool to remove the slight bump between the old and new varnish.
6. Wax the wood with a quality polish.

Using Bleach

1. Mask off the area around the stain so that the non-stained areas are protected.
2. Next, remove the old finish and or wax using the sandpaper approach above.
3. Put on rubber gloves and eye protection.
4. Using a brush, bleach the wood with oxalic .
5. Let it sit for a few hours. The stain should fade to nearly the wood's original color, but it's a slow process.

6. Use a clean sponge and water to remove the bleach completely and prevent further fading of the wood color.
7. Apply vinegar to neutralize the wood. This will prevent the wood from lightening the stain or varnish when you brush it on.
8. Let the wood dry thoroughly.
9. Apply wood stain, if needed, and let it dry again.
10. Brush on several light coats of varnish to match the original finish.
11. Feather the edges of the new varnish with #0000 steel wool to remove the slight bump between the old and new varnish. Remove dust with a tack cloth.
12. Wax the wood with a quality polish.

Cleaning Your Furniture

The removal of the existing polish or wax can best be performed using naphtha and a clean lint free cloth. Gently wipe the surface with a damp cloth without flooding the surface.

Another method involves boiling two tea bags in two cups of water. Let it cool to room temperature. Then dip a rag in the tea and squeeze it out a bit and rub down to remove any polish and dirt on the furniture.

Murphy Oil Soap can also be used. Be sure to follow the instructions on the container and spray the product on a damp cloth and then to gently wipe the finish to remove the build up. It may require several applications.

IF the finish is quality lacquer, professionals can spray on a special lacquer retarder. This may soften the finish so any remaining moisture can escape and the finish can reconstitute itself. The result will slightly change the sheen level, but the total surface can then be hand rubbed to a constant sheen. This procedure can not be applied to any type of finish other than quality lacquer. This approach is only for professionals.

Disclaimer

Phil Rasmussen and the Mountain Woodworker (collectively “we”) assume no responsibility for the techniques/methods described above, nor for the method in which an individual might apply them, nor for the results when said techniques/methods are used. The variety of woods, finishes, and glues used in making furniture or other wood products make it impossible to assure that any of the techniques/methods described in this article will work. Furthermore we have no control over how the techniques/methods

are used. The user of any of the techniques/methods described should first test the application/method before using it on their furniture or wood products. If there is any doubt or hesitation in using/apply any of the above techniques/methods, the user should consult with a qualified furniture restorer/finisher.