

# Leather and Linen

Mold and mildew on natural fibers



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## Mildew and mold on natural fibers

So we received a call after this homeowner discovered that their pipes froze and when they thawed, they started leaking. Well they came through the ceiling and saturated everything in the living room below. They thought that this sofa was ruined because of the severe stains and mold and mildew growth. But because they really loved this piece and it was hard to find, they were really hoping that it could be restored. So in the picture below you can see a lot of the staining is what is known as browning. This happens when the cellulose in the natural linen fiber gets wet and stays wet too long. The cellulose will begin to oxidize. Kind of like when you bite into an apple and it turns brown. And there was also mold and mildew colonizing.



The challenge with fibers like linen and cotton is that, unlike synthetic fibers, they become a food source for the mold and mildew. With synthetic fibers like polyester and nylon, mold and mildew find organic matter such as skin oils, food, dustmites, dead skin cells etc to feed on but at those are cleaned out the mold and

mildew is removed. But natural fibers are the food source for mold and mildew and become permanently stained by them.

Also the browning that occurs, while it seems like a stain, it is not. It is a reaction that occurs when the cellulose oxidizes. So the brown spots that can be seen cannot be "cleaned off" they have to be reversed. What we have discovered is that it takes a combination of just the right conditions to reverse the oxidation. It is rarely 100% effective but great improvements can be made without damaging or severely weakening the integrity of the fabric. This is why we have to bring a piece like this into our facility. It is impossible to create these conditions in-home.

Restoring a piece like this is more about the process than it is about some kind of miracle cleaner. Being a second generation cleaner with over 30 years in the textile cleaning business, I have had a lot of time to discover the process we use to take a high end sofa like this a return it to a very usable condition.

