



UNCURL PHOTOGRAPHS BY CREATING A DIY MOISTURE CHAMBER

1. You can create a DIY moisture chamber with items found around the home or easily purchased at an art supply store or the place you purchase home goods. Proceed with caution. Try this out on a picture you don't care about. You will need the following items:
 - a. A plastic tub or container. Make sure it is deep enough to hold everything with lots of space around it. A clear one will allow you to see what is happening without opening the top. Try to get one that is 70 quarts or larger. A 70 quart container is 16 W x 23L x 13D.
 - b. A rubber coated wire rack. Make sure it's clean and will stand over the water. It should also provide ventilation. A shelf in your closet or refrigerator may work. Cookie racks, dish drying racks or clothes drying racks may work. It should be small enough to fit in the tub, but large enough to accommodate your photograph or documents. Make sure it is not made out of metal that may have rust spots.
 - c. Archival blotting paper – this can be purchased from art supply stores cheaper than an archival supply house. Make sure it is PH neutral paper, acid free, lignin free, unbuffered.
2. When trying this method, use caution. Don't use the best photograph or documents in your collection. Start with something less important. If you think all your photographs are important, try finding a curled photograph from a flea market or used goods shop where people have a habit of dropping off boxes of photographs that can't be identified when family members have passed.
3. The tub should be placed in an area where it can remain undisturbed for a period of time – at least a day. Make sure pets or people won't bang into it and disturb the water or knock the photographs off the rack. Placing a towel under the tub will capture any condensation that may form on the outside of the container. Start the project early in the day so that you will have enough time to check it periodically without having to leave it overnight. You can place a hygrometer inside the plastic container to measure the moisture level. If using a hygrometer, the RH will go up to 60%-100%. Place about two inches of water in the bottom of the tub. Don't use warm or hot water; it causes too much condensation and may result in moisture dripping onto photograph from the lid overhead. Room temperature water is fine. Place the rack over the water. The rack should be about one inch above the waterline. It should **not** be submerged in the water. Put the photograph on the rack and let it sit.



4. Close the lid and leave it alone. Check the photograph after an hour. Make sure that condensation isn't forming on the picture itself, either inside or dripping from above. If the lid of the container is collecting condensation, wipe it with a clean dry cloth. This will prevent drops from landing from above onto the photograph or document. To make sure condensation from the top doesn't drip down on to documents, you can place a plastic sheet over the photograph. Condensation on the sides of the tub is fine.
5. Continue to check your documents once every hour. Don't over humidify. Papers can bleed or pages can cockle. Papers should relax in 4-6 hours. When you check a photograph, you should notice that it is softer and feels more like paper. The paper is absorbing the moisture around it which is softening it and making it more limber.
6. When you try to uncurl the photograph, if it resists or starts to crack, put it back into the chamber and allow it to absorb more moisture. If you find your efforts are not working and the paper is still too brittle or fragile to unfurl, gently curl it back up and contact a conservator. Better to err on the side of caution than ruin a precious family heirloom, or risk destroying important documents. If you see any bleeding, stop immediately and let the photograph or document dry as is and contact a conservator.
7. When removing documents from the humidity chamber be sure they do not hit the condensation that has accumulated on the sides of the chamber. Moistened paper is extremely fragile, so handle with care. Hold it on the bottoms to be sure tearing doesn't occur. Once the photograph or document has absorbed enough moisture to relax enough to lay flat without damaging it, place it between two sheets of blotting paper on a flat surface. Place heavy books on top and let sit to dry. It may take up to a couple of days for items to dry completely.
8. As always, if the documents in your care are extremely old, extremely damaged and you think it is beyond your skill level to treat them, by all means contact a conservator. In all cases it is better to err on the side of caution.



Moisture Chamber