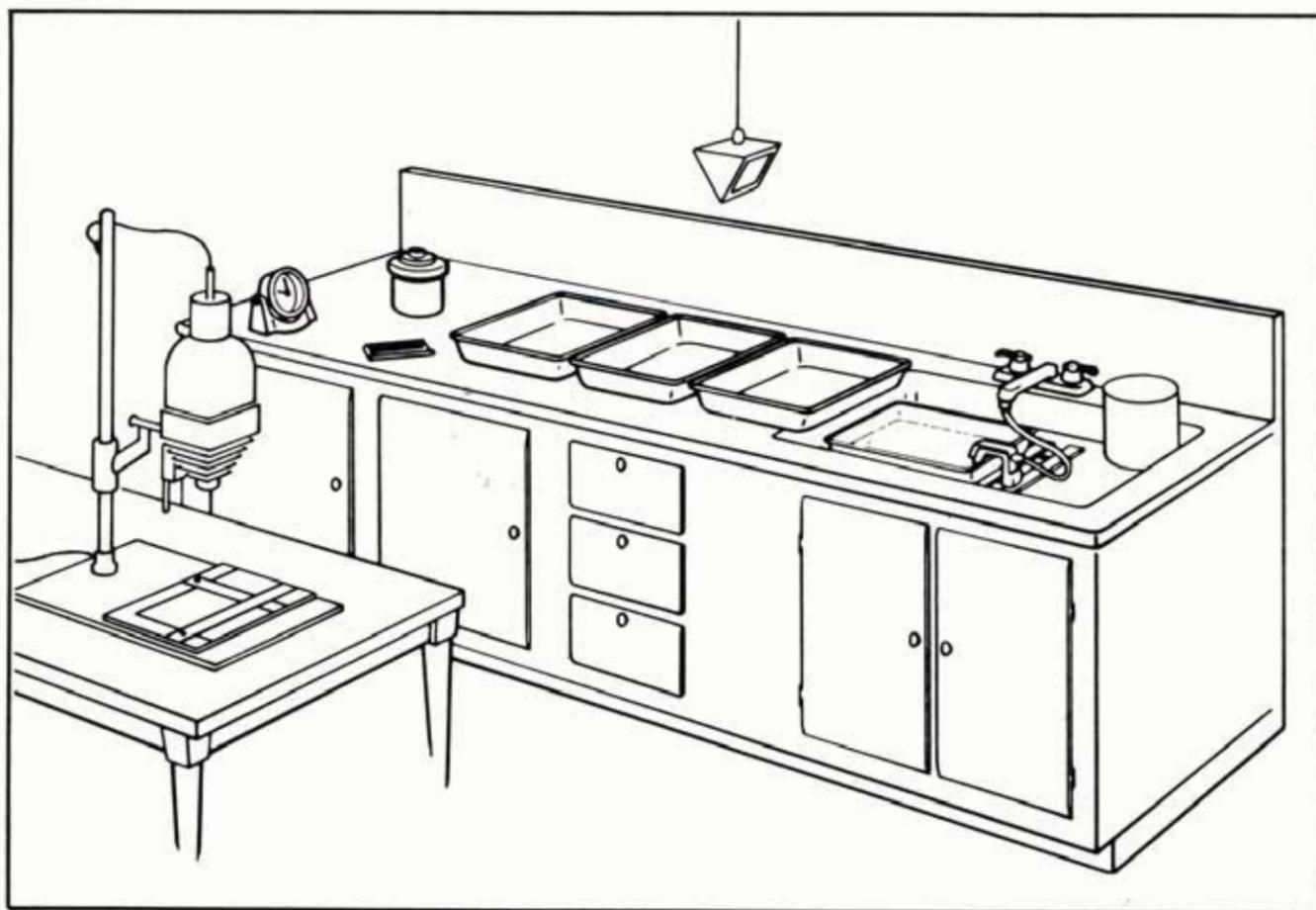


Photography

CREATING YOUR OWN DARKROOM

Member Introduction

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WISCONSIN 4-H PUBLICATION

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CONTENTS

Introduction	2	Is a Basement Dark Area Really Ideal?.....	3
Why Do You Need a Darkroom?.....	2	What About a Bathroom Darkroom?.....	4
Let's Hear It . . . For a Light Room!		What If I Want to Build a Darkroom?.....	4
Let's Hear It . . . For a Wet Area!		What Other Tips Can You Offer?.....	6
But What About the Darkroom?	2		
How Dark Should a Darkroom Be?.....	3		



INTRODUCTION

Fitting a darkroom into your life may be easier than you think. For one thing, not everything that is normally associated with darkroom activity needs to be carried on in the darkroom. For another, a darkroom does not need to be a room at all; it might just be a dark area where you carry on those darkroom functions that need the special brand of absolute darkness all of us have come to associate with darkroom activity.

WHY DO YOU NEED A DARKROOM?

You need a darkroom primarily for printing. That means you need an area large enough to accommodate your enlarger and the biggest print it will make. Beyond that, you may need room for your one-step color print processor for color prints or the trays in which you plan to process your black-and-white prints.

If you will be processing film or paper in light-tight containers, you need a darkroom just big enough to hold you and the container during the loading process. After that you easily can adjourn to a laundry room or a kitchen where you have the running water and the drain you need.

You do not need a darkroom for chemical mixing. In fact, separating the chemical mixing from the printing area can protect your photographic paper from chemical particles that sometimes settle out of the air. It also can protect you from inhaling chemical dust or fumes in an enclosed area.

Neither do you need a darkroom for all the various finishing steps like spotting, cutting, and mounting prints, and examining, sorting, and storing negatives, prints and slides.

Let's Hear It . . . For a Light Room!

To complement your darkroom you very well may want to have a light room; that is, a comfortable, well-lighted area where you have some elbow room. You might be able to find space for a light room in extra room in your own bedroom. Here you could do your print finishing steps in peace, perhaps with your favorite music playing in the background. Here you also could store your finished darkroom work.

Let's Hear It . . . For a Wet Area!

Somewhere near your darkroom, if not actually in your darkroom, you need access to hot and cold running water. If that water has any impurities like rust in it, you need a way to filter the water (perhaps through several layers of cheesecloth) so that the water you are using in your photographic work is clear.

Normally it is safe to put the small amount of chemicals you will be using down the drain to a sewer or septic tank. But you always should heed any warnings on labels and you may want to double-check local ordinances as well.

Generally speaking you always want to dilute processing waste in plenty of water before you put it down the drain. If you happen to have a septic tank, you should be able to dispose of up to about five gallons of processing waste and wash water per family member per day without affecting the efficiency of the septic system. You will want to run some cold water down the drain and thoroughly clean up all wet area surfaces when you are done.

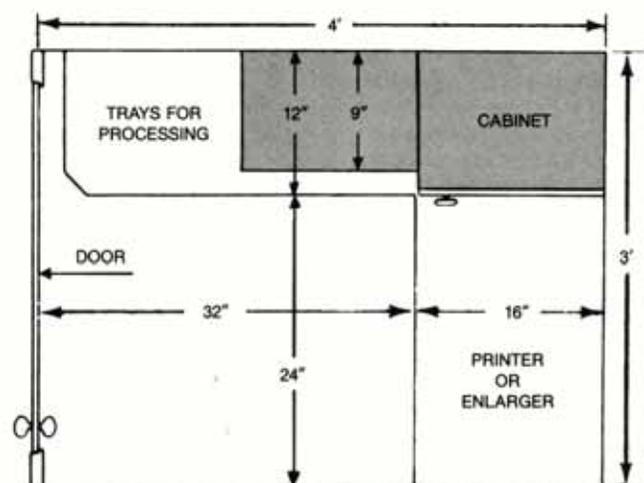
BUT WHAT ABOUT THE DARKROOM?

Now that you know that you do not need running water in your darkroom, just near it, you are free to roam the house looking for the ideal spot for your darkroom.

If you are going to be doing color work only, an empty closet should work out fine. Just install some weatherstripping around the door to keep out the light and add some electrical outlets to power your enlarger, your safelight, and any other equipment you will be using (see Image 1).

If you do not have an empty closet or if you would like to have enough room for tray processing of black-and-white prints, consider the very real advantages of creating a dark area instead of a darkroom. The main thing you need to work on is darkness and that may not be as difficult to come by as you think.

Image 1: Suggested layout for a closet darkroom.



For instance, you might start with a dark basement that has only a few small windows. You could cover those windows with a couple of thicknesses of black (or garden) plastic. (You would want to use at least two thicknesses to protect against the possibility of pinholes in individual layers. You might use lengths of wood to brace the plastic tightly in place so that the windows could be uncovered, and recovered, easily.) You then could use opaque tape (black photographic tape, for instance) to stop any little light leaks around the windows.

After you have worked at making any area light-tight, you will want to test it to make sure that you have created that special brand of darkness you need for darkroom work.

HOW DARK SHOULD A DARKROOM BE?

Stand in your dark area for at least five minutes and preferably 15 to 20 minutes. Hold a sheet of white paper up in front of you. If you can see the white paper or anything else, your dark area is not dark enough. Check for and cover any additional light leaks. Pay special attention to cracks around any doors leading to your dark area. Try the darkness test again.

Once you have made your area light-tight, you want it to stay that way while you are working. Make sure you can lock or secure your dark area so that no member of your family will shed unwanted light on your darkroom work. A sign hung on the doorknob, "Darkroom In Use. Please Keep Out!" can help stop would-be intruders, at least the ones who can read.

Sometimes family members can cause unexpected light leaks without ever entering your dark area. Let's say you are working near a door that leads to a dark hall. A family member walks by and turns on the hall light. You performed your darkness test with the hall light off. Suddenly hall light is entering your dark area from the crack under the door. You easily can avoid such unexpected light leaks simply by stuffing a throw rug under any such door.

One of the real beauties of a basement location for your dark area is the lack of demand other family members normally put on the basement. Not only is there less likelihood of interruption, but also there is the real possibility that you can leave your darkroom equipment set up and ready to go - and find it just the way you left it when you are ready to work again.

IS A BASEMENT DARK AREA REALLY IDEAL?

Many basements stay within the ideal temperature range for darkroom work - 68° to 72° F - during much of the year. Many basements also seem to be dry enough; the ideal relative humidity for darkroom work falls between 45 and 50 percent.

If your basement tends to be humid, your mom and dad probably already have installed a dehumidifier to keep the mildew off the walls, clothes and furniture in your basement. If they haven't, your desire to do darkroom work might tip the scales in favor of an investment that will give them and you the benefit of a dry basement.

Not only is it a good idea to keep the air in your dark area relatively dry, but you also want to keep your dark area relatively dust-free. A vacuum cleaner can help you clean up the area before you go to work. Covering your enlarger with a pillow case or plastic bag between darkroom sessions also will help keep the dust off. Or you might throw a big sheet of plastic over your entire work area when you are done and uncover your work area when you are ready to work again.

If dustballs and other fuzzies seem to be accumulating and falling from the ceiling, you might cover the ceiling over your work area with a sheet of plastic. Or better yet, salvage a piece of paneling from some other household project and install that over your work area to seal the dust out. A 4 x 8-foot sheet of paneling is just about the size of some people's darkrooms.

Later if you decide to build a room in your dark area, you will want to keep paneling in mind. You do not have to have solid, sturdy-built walls to have a darkroom. But it helps if you have a nice, fresh surface over wall studs and cinderblock. It also helps if that surface does not attract and hold dust and if that surface is relatively easy to keep clean.

Paneling covers a lot of area quickly and keeps the light as well as the dust out. You can keep the cost down by purchasing damaged or marred paneling on sale or from the seconds pile at a local lumberyard.

The surface on which you work in your dark area also should be something that is easy to keep clean and that does not change character or flake off when wet. Chances are that you may have such a surface lurking somewhere in your basement. If not you can visit building supply stores in your area. Such stores often sell off countertops that were cut



incorrectly for custom installations. These can be quite inexpensive. But you have to look around and be patient until you find just the “mistake” you need.

Electrical outlets - a must in any darkroom - usually are in plentiful supply in a basement. You will need at least enough outlets to plug in your safelights and your enlarger. But you also may want plugs available for a radio and, eventually, for an enlarging timer. If for some reason additional outlets are being installed, request more outlets than you would ever dream you'd need. Regular darkroom users say you will be glad you did.

WHAT ABOUT A BATHROOM DARKROOM?

The disadvantage of a bathroom darkroom is that it almost always has to be a temporary setup. That means each time you use it, you have to make it dark, put a piece of plywood over the bathtub to give you a working surface, and reinstall your safelights (or at least your safelight filters) over existing room lights. In between darkroom sessions you have to store everything (see Image 2).

The advantages, however, begin to add up for people who like to have running water in their darkrooms. The mixing faucet on the bathtub makes it easy to get the water

temperature just right. Often you can add a hand shower hose, the kind you use for washing your hair or the dog, to provide a convenient way for washing prints.

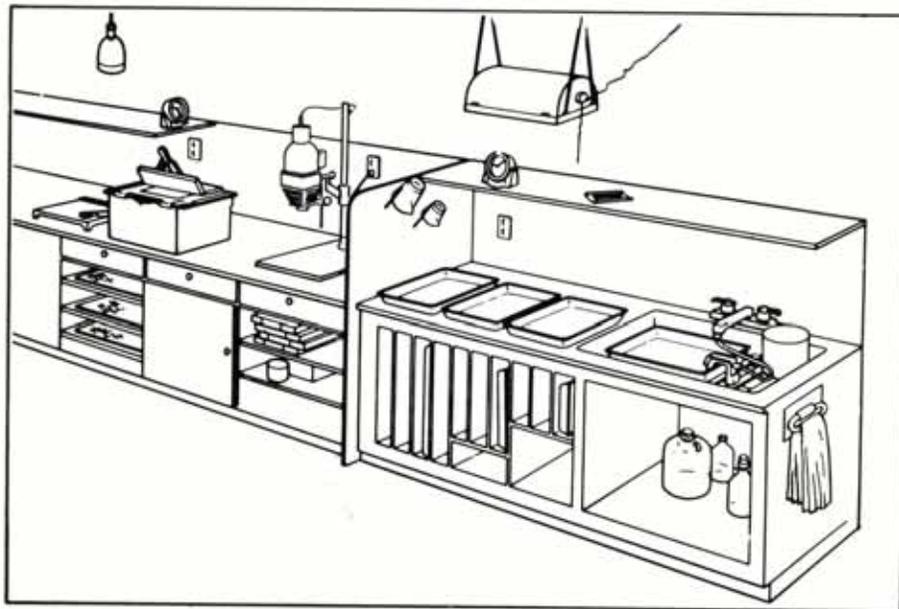
As it turns out, it is usually pretty easy to make a bathroom dark because bathrooms usually have very few windows. Bathroom surfaces usually are smooth and easy to clean. Electrical outlets usually are available.

But the reason you may decide to opt for a bathroom darkroom may have more to do with the temperature than anything else. In cooler climates where basement temperatures fall far below ideal in winter, bathroom temperatures should be closer to what you need to keep a quarter-inch of solution in a tray within the recommended temperature range. It is also easier to raise the temperature in a small room by using an electric heater, or simply by putting around enough before you start work so that you raise room temperature with your own body heat.

WHAT IF I WANT TO BUILD A DARKROOM?

Once you have staked out a dark area in the basement, for instance, it may be pretty easy to put up some paneling and turn your area into a room. If you have positioned your dark

Image 2: An example darkroom setup.



area near your wet area, it also may be fairly easy to run a drain pipe from the sink in your darkroom through the wall to a nearby laundry tub.

Before you start work on any sort of permanent darkroom, you will want to do plenty of planning (see Image 3). Take a look at suggested plans for permanent darkrooms (see Image 4). You will find that most call for a wet area and one or more dry areas.

Image 3: Suggested layouts for darkrooms with running water.

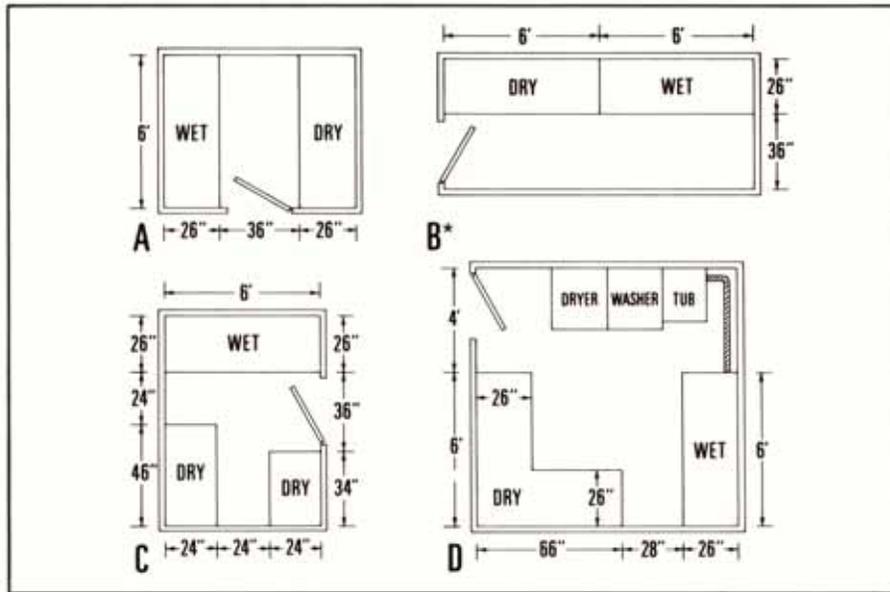
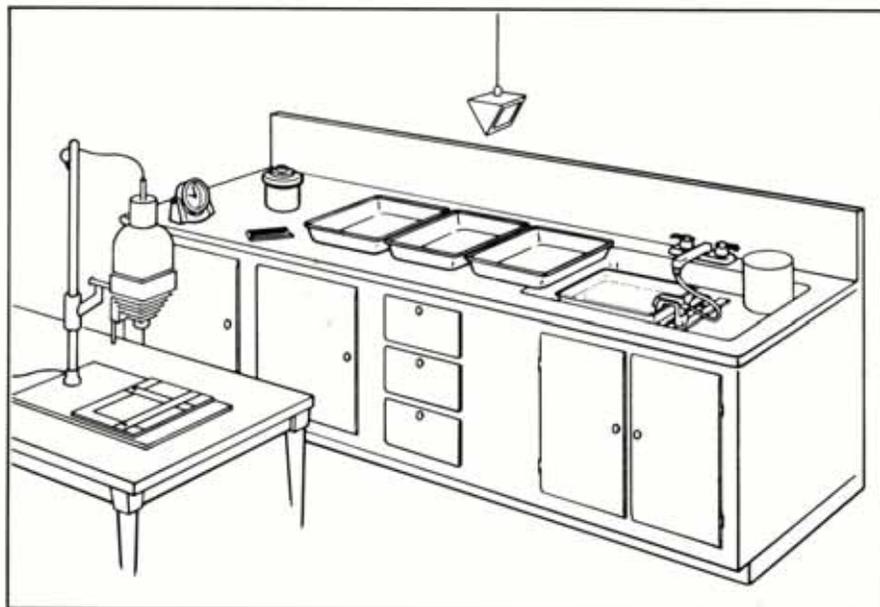


Image 4: Example of a permanent darkroom layout.



The work bench for the dry area can be fashioned from discarded kitchen cabinets or can be built from scratch in the family woodworking shop. It should incorporate plenty of drawers and shelves for storage of your enlarging equipment and supplies. For convenience you also might want to plan for a light-tight drawer or so-called “dark drawer” near your enlarger.

Such a drawer allows you quick access to your photographic paper while you are making prints. It eliminates the need to open and close cumbersome paper packaging every time you need a piece of paper (see Image 5). You simply put the paper you plan to use in the drawer before you start work and return any unused paper to its package when you have finished printing.

Ideally a dark drawer should be big enough to fit the largest size paper you plan to use. It should have a lighttight lid that closes automatically when you close the drawer. It should be painted flat black inside.

The dry area should be separated either by distance or by a splash guard from the wet area. This protects dry materials from splashes of water and chemicals. A splash guard also provides a handy place to hang graduates on wooden pegs.

The work bench for the wet area should provide storage space for processing trays and chemical solutions. Through

a combination of cabinets and shelves, you also can provide a place for all the other small equipment you will need as you mix chemicals and process film and prints.

The surface of the wet work bench should be waterproof. Among the recommended surfaces are laminated plastic, vinyl flooring and linoleum rubbed thoroughly with hard wax.

The wet area also should include a hot and cold mixing faucet over a sink. The sink easily can be built from exterior plywood. Waterproof glue and screws can hold the wood together. Polyurethane varnish can be used to make it waterproof.

The advantage of building your own sink is that you can make it the size and depth you want. Ideally, for instance, you want the sink bottom at least 15 inches below the nozzle of the faucet so that you will have enough room to fill gallon jugs.

Above both the wet and dry areas you will need safelights or, at least, lights of the proper wattage, fit with the proper safelight filter for the darkroom work you are doing. Both should hang no less than four feet from your working surface. The safelight over the dry area might be somewhat smaller than the safelight over your wet area. Both, of course, will need power from properly grounded electrical plugs.

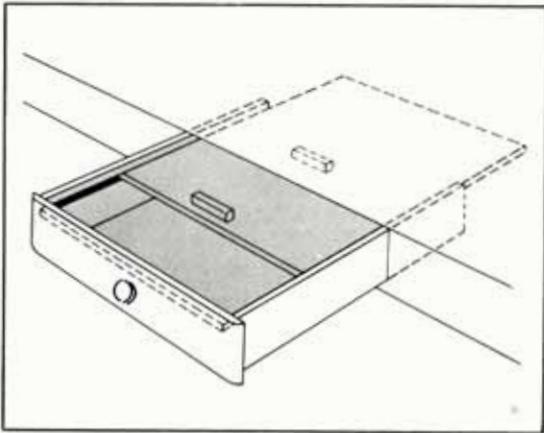
WHAT OTHER TIPS CAN YOU OFFER?

Whatever the size or sophistication of your darkroom, you will want to keep you eyes open for other people’s discards and hand-me-downs. Many a safelight or timer has been salvaged from the junk yard or picked up for next to nothing at a local garage sale.

If you are looking for something in which to mix chemicals, consider the small plastic buckets, even the small plastic garbage cans, so often found in kitchens and utility areas. Such plastic items tend to clean up well.

If you are looking for something in which to store stop bath and fixer, leave your name at the local pharmacy. They often discard gallon-size syrup bottles that have good thick plastic walls and good caps and seals. Be sure to wash the bottles thoroughly and, of course, store the chemicals away from sunlight.

Image 5: An example dark drawer.



For developer storage consider investing in the type of collapsible bottle that allows you to eliminate air from the container as you use the chemical inside.

Keep track of how long you have been using various chemical solutions and how much material you have put through them so that you can discard them before they are totally exhausted. Attach self-adhesive paper directly to the bottles for such notations.

Find a source of luminous tape and use very small amounts of it to help you locate the edge of the countertop, a pull chain or the start/stop switch of your timer in the dark. Keep the tape as far away from sensitive materials as possible.

Feel free to use any old timer you can find to get started. But when you are in the position to improve your equipment, consider the possibility of getting a good, accurate timer. Look in kitchen supply stores as well as photo supply stores. You may be able to find a timer that will allow you to program it to time more than one operation at a time. You also may be able to find a timer that audibly clicks off the seconds so that

you can dodge or burn-in a print without needing to keep one eye on the clock. Consider sharing your good, accurate timer with the baker of the house.

Avoid introducing illuminated dials or electronic readouts into your darkroom unless the equipment has been designed specifically for darkroom use.

Consult photo magazines, publications and web sites from photo manufacturers for help in carrying out any aspect of your basic darkroom design.

When you are looking for further improvements to make in your darkroom, consider what will make you more comfortable. That may involve putting some stereo speakers in your darkroom so that you truly can enjoy the sounds of your favorite music as you work.

Whatever you do, make your darkroom a place where you enjoy spending time. If you are like most people who get involved in darkroom work, you will find yourself not only spending a lot of time in the darkroom, but also losing track of time once you get in there.





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