



Digging, Dividing & Storing Dahlia Tubers in Western Montana

Time to Cut Down the Plants: In some areas of the United States dahlia tubers can overwinter in the ground since they are actually perennials. That is not the case in Western Montana. The tubers must not freeze. I tend to mark the end of the season by a killing frost. You don't have to wait for a killing frost if you have a need to get them out of the ground and divided before that. They do need a minimum of 90 days in the ground before being dug. With a hard frost (28 degrees or less), the vegetative part of the plant above ground will turn dark brown. Do not dig them yet. Leave them in the



Flagging with Name

ground for approximately another week or so if weather permits. The tubers will harden off and the eyes will "push" so they will be easier to spot when dividing. If the weather forecast is for temperatures **well below freezing**, you might want to cover the dahlia bed with a heavy layer of mulch to be sure the tubers below ground don't freeze. After no more than two weeks, cut the plants off at about 6 inches so you will have a handle. I also tie a piece of flagging tape with



Dahlias after Frost

the name of the dahlia on it on this handle (you can write other information you might want in the future like plant height or color).

Digging Tuber Clumps: Before digging you will want to remove any plant stakes, irrigation paraphernalia, and anything that will get in your way when digging. The best tool to use for this for digging the tubers is a spading fork. Place the fork about a foot from the stem and gently pry back on the fork to loosen the soil. Do this around as much of the plant as possible without damaging other plants near by and carefully lift the clump of tubers to the surface. They are quite fragile at this point. If you can leave the clump on top of the soil a couple of hours before shaking off the soil, you can limit damaging the tuber necks (a tuber with a broken neck will not grow). After a couple of hours, gently lift the clump by the stem handle and carefully transport to a washing station.



Setting Up a Washing Station: If you have a lot of clumps to wash, you will want to set up a washing station outdoors. We made a screen of 2"x4"s and hardware cloth that sits on sawhorses over a depression in the garden. We later added a plastic garbage bag to the front of the screen to help deflect some of the overspray. You will need a garden hose and spray nozzle. This is usually cold, wet and dirty work and I



dress accordingly.

Washing the Clumps: Using a stream of water, wash off as much dirt as possible. The skin of the tuber can be damaged if the spray is too harsh. Don't expect to remove every speck of dirt. More will come off when dividing. After washing, the tubers should dry off approximately 24 hours before dividing. I usually put them in my greenhouse to dry. One of the biggest problems in our climate is desiccation, so don't leave them exposed to the air too long. If you have a lot of dahlias, you might want to stagger your digging (i.e. dig, dry, divide and then do some more) so they don't start to shrivel before they are bagged for storage.

Clump Dividing Tools & Station: Before starting to divide the clumps of tubers, it is best to gather various tools to help with the job and set up a work area. You will want good lighting over a flat surface to work on. I use an old cutting board. Pointed shears are very helpful along with pruners such as Felco. I also have a PVC pipe cutter to use on the largest stems that can't be cut with pruners. I use an old cleaver and hammer when I have to divide a very large clump of tubers. It is helpful to have a garbage pail or other container at hand for discarded plant material. I have a stack of used nursery trays in which to dry tubers before bagging. A supply of recloseable plastic bags, an ice pick for putting holes in the bags,



Various cutting tools.

masking tape and marker, bags of coarse vermiculite and recycled apple boxes.



Dividing Clumps: Remove all string-like feeder roots, tubers with broken necks, the "mother tuber" if present unless it is the only tuber (the mother tuber is the one you planted in the spring. It is usually darker than the other tubers and often rots and dies during the growing season). Remove any very small or skinny tubers smaller around than a pencil. Any rotting tubers should be removed. A large tuber can be cut shorter if only a portion has rotted. You might be

able to save it this way. Tubers on another tuber should be removed since they are "blind" (have no eye). Now look for "eyes"—the eye is where the plant sprout will grow. All eyes are at the stem end of the clump, not all over the tuber as in a potato. They can be hard to discern and you will get better with practice. You will make some mistakes—we all do. One of the reasons for leaving the tubers in the ground after frost is so the plant will "push" the eyes to make them more visible. Dahlias are perennials and will try to put out new leaves when the plant above ground is killed by frost. Once you identify an eye, you can cut to separate the tuber or small clump of tubers from the larger clump. Don't worry that you separate all tubers into singles. More eyes may be visible in the spring and you can separate them even more if you want to. Too much stem material left with the tuber though is what can start rot in storage—it takes time to get it right. Your second year will be more successful than your first. Once the tubers are separated as best you can, I dip the cuts in powdered sulfur to help prevent rot. Do keep your information about the plant with the tubers so you will know the plant name, color, height, etc.

Bagging & Storing: After the tubers are dry to the touch (20-30 minutes in our dry climate), they can be bagged. I punch holes in a recloseable plastic bag to promote air exchange. Place the tubers in the bag with an equal amount of coarse vermiculite or you can use things such as pet bedding that comes in bales. The advantage of coarse vermiculite is that it can be used year after year and it won't carry mold spores. I place the plant information in the bag with the tubers. Large clumps may take several bags for tubers. I then place them in apple boxes. Once the box is full it can be stored in an area that is above freezing throughout the winter such as an insulated garage, root cellar, in an unheated room in your house, or in the crawl space under your house if it is between 38 and 45 degrees throughout the period.



Separated & Bagged for Storage

Inspecting Bags for Rot: Most rot seems to happen during the first month or so of storage. I like to go through the bags and remove any rotten tubers to prevent the rot from spreading. If I find mold on cut surfaces. These tubers can usually be saved if sprayed or dipped in kitchen Lysol and rebagged. It is good to recheck every month or so during the winter but I find this usually doesn't happen. Don't be surprised if you find tubers sprouting in the bags in spring. This really isn't a problem and lets you know the tuber is viable. If the sprout breaks off, another should grow to replace it.