

PROPAGATION SECRETS YOUR PLANTS CAN TELL YOU

By Patricia Reh - Revised: March 8, 2007

Once in awhile an old out-of-print garden book or a yellowing thrift-store-find magazine will contain one author's growing or propagation treasures since "fallen through the cracks", and not now in newer publications or cyberspace. And there's that good old Sunset book, sometimes consulted for its mine of growing helps, sometimes left forgotten on a shelf.

But with many lovely plants still not found in the trade, all forms of research may turn up little or nothing. Study the plant itself above and below ground surface. It will probably signal to you what to do to most easily propagate it, by using the method it is already evolved into putting the most of its own energy into for increasing itself.

Old ratty annual-or-biennial-looking thing with tons of seed production and/or obvious seedlings already surrounding it? Do seed, and moving of small youngsters in suitable weather. Trying to move a large biennial or annual nearing the end of its normal lifespan is probably unproductive; moreover, this could hamper its completion of viable seed.

If garrulous gardeners and other sources have no info on what treatment a particular plant's seeds must have, the only recourse is experimentation. Try sowing some fresh while holding the rest back for later sowing. We do know that dry ripe seed rattling in dry brown pods tells us it can be stored dry (though we don't know for how short or long a time) but that seed from moist berries must stay wet stratified (usually mimicking woodland conditions) until sprouting.

A perennial big as a shrub but having hollow, pithy, possibly seasonal stems? Stem cuttings of these large, interesting "subshrubs" such as Matilija poppy aren't easy to root, especially in the Sierra Foothills, and the roots should be looked at to see if they are big and fleshy, or multiple and woody, and suckering into a thicket. Root suckers popping up around the big plant are its green light for us to dig root divisions, since obviously the roots have multiple growth buds all over them.

Big fleshy Matilija Poppy, Elderberry, or African Fuchsia** root divisions with the juicy fleshy breaks resulting from detachment from the parent warn us that these propagules had better be started in cool weather—preferably when a winter-dormancy plant of this type is dormant or just waking up, so that juicy new growth shoots aren't too long and won't be broken off also. Heat and watering equals rot, probably starting where breaks or skin scrapes are, because disease and decomposition organisms in the soil are active in moisture and warmth. Yet we can't let fresh new root divisions of anything go summer dry, either, as they will desiccate. But these rot-inducing organisms are dormant in cold, and so COLD AND WATER WE CAN USUALLY GET AWAY WITH. This rot problem, of course, isn't quite so critical with the woody suckering shrubs such as Spiraea** and Snowberry. But if fleshy, multiple-growth-point roots have to be salvaged in the heat or not at all, get them in cool loose soil mix right away, about as wet as a wrung-out sponge, and smaller ones in smaller soil bags could also be put in a cooler of "blue ice" packets if the car trip will be very long.

Once home, big or huge salvaged roots should be held over in the coolest shadiest place you have, still keeping the loose soil mix about as damp as a wrung-out sponge. Some may survive into fall, although any that sprout new growth before then should be potted up in gallons or bigger. Small-sized ones in small baggies of soil can escape summer heat in the refrigerator...If your other family members won't go ballistic.

Do not think that by dividing a large Purple Milkweed (*Asclepias Cordifolia*) or any other root resembling a carrot—even if dormant—that you'll get several plants because the root forked in two or three. That carrotlike appearance with just one growth point at the top of the root serves as a warning that what you'll get is the original root now laid open to rotting, plus a couple of aggravating "blind tubers" which then will sit in the soil in limbo because they have no eye. So, BEFORE chopping away at roots, it's best to actually see the root full of multiple eyes, or buds—and/or already suckering.

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The same cold rainy weather that makes large root divisions easier and improves the survival chances of the very fussy Purple Milkweed root and California (Sierra Foothills) native purple Solanums, or Nightshades, if these two must be moved at all, is also vital to dividing smaller summer-dormant plants. Here we can exclude large, marble-sized, summer-dormant corms such as Brodiaeas which have plenty of reserve in them, and can be dug summer-dry and dormant, even stored in dry soil awhile.

But examining a really crowded clump of the varieties of foothill Shooting Stars (*Dodecatheon*) that hurry to grow and reproduce in wet cool Spring and then die to the ground till next Spring, tells us these too need to be divided or transplanted in wet and cool weather, which should last at least three weeks more. Many growth points crammed together in the clump, seen as soon as leaves are up, tell us it might divide. Digging a clump with a trowel shows us very many separate little plants, and so many tiny tan tubers it appears someone had spilled a bag of brown rice. These tiny tubers are all that carry the plant over during the many months when tops have died down, probably even with the thick mousetaillike roots on the fleshy plants. This whole arrangement is one which can't easily take hold again, and survive, if disturbed too soon before late-Spring heat cracks down and severely stresses these tender juicy plants. Then if they flop, and aren't feeding the rice-grain-sized tubers, the latter may be in no shape to return the plant next year.

If you divide and move these Shooting Stars in the coolness and damp in which they have all their activity, just as the leaves show, they easily take hold—and often do when gophers, and dogs digging for gophers, tear up and spread a Shooting Star clump with their big claws! They take any amount of rainwater and sloppy mud early in the year.

So, if at all possible, find out by observation not only what a plant looks like, but how it behaves in the habitat it evolved in. Fawn Lilies (*Erythroniums*) can fool you by going summer dormant, since their tubers or corms (depending on variety) must NEVER go totally summer-dry.

Cuttings of various plants vary widely too—And these qualities CAN'T be seen by looking and must be found by experimentation. A Penstemon Rebecca Lance was working with refused to root any stem cuttings for her at any time except in the cold. A mysterious shrub I salvaged does the direct opposite—the hotter it is, the faster this thing throws new white roots in water or soil, from stem cuttings or crown divisions. Laura Rutledge reminded us that if you don't know whether basal or tip cuttings root best, cut the tip off the cutting and plant both pieces.

Examining plants for possible crown division is easier. If one trunk, forked or not, comes out of a single central spot, and no roots grow on the close bases of any branch, better not chop the crown. But if it looks as if someone had squashed a bundle of two or more of the plants tight together and planted it, that's our signal to stick a shovel in there. A woody old Bridal wreath Spiraea** proved very tough to saw. Yet, each crown division came off with a little bit of roots, and about 15 rooted divisions of the huge bush doomed by roadwork grew on.

Lastly, "the big yank". In late Fall or early Winter, just as you're ready to cut back old spent stems of herbaceous perennials, examine bases of stems to see if they root shallowly, some maybe even showing roots above soil surface. If so, grasp one near the base and pull. If there's movement, pull it up... complete with roots and shoots. Yank plenty of these stems and you renovate the old clump, plus have many plantlets, which must be planted or heeled-in immediately since they deteriorate sitting in water. Then, if even more propagules are wanted, go through the remaining old stems which you cut off, and pot the good-looking ones with lots of basal nodes in gallons of friable mix, but not straight "potting mix" In a month or so, some may make plantlets underground. If impatient to see if anything's happening, dump the pot VERY gently; these new shoots are soft and brittle.

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**Denotes plants that are non-California native, except for two pink flowered native Spiraea plants.