

Garden Update

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Collecting and Starting Seeds from Trees and Shrubs

Now is a great time to collect seeds from trees and shrubs to start your own and add diversity to your landscape. If you think starting trees from seeds is a silly way to get trees into your landscape, think again. I appreciate the story Justin Evertson of the Nebraska Statewide Arboretum likes to share about his 15-foot-tall bur oak. Justin started the tree from an acorn he planted just ten years ago. The tree was quick to establish and grow, disavowing oaks as slow-growing trees.

A walk through your neighbor's yard (with their permission of course) is a simple way to collect seeds. Choose seeds with an unblemished seed coat and discard seeds that have tiny holes as this indicates insect feeding. Be sure to mark the seeds so you know what's what. Next, you can get the seed scarification and stratification process started.

Scarification, Stratification

All seeds will have different scarification and stratification requirements before germination can take place. Textbooks and online resources provide a lot of information for proper techniques to meet a seed's requirements for germination. These processes are nature's way of delaying germination until conditions are met and increases likelihood seedlings survive.

Scarification is the softening of the hard seed coat. Nicking, chipping, or sanding the seed coat are just a few of the ways that allows water to soak through the seed coat to the embryo inside, speeding germination.

Stratification is the cold and moist period that seeds must go through to overwinter and successfully germinate when conditions are ideal. A seed from a plant in the tropics often has no stratification requirement but it's not in a seed's best interest to germinate in December in this region, so winter hardy plants have developed overwintering strategies to help seeds germinate when the time is ideal for growth and development. People sometimes think putting seeds into the freezer is good enough to simulate stratification, but this is simply not the case. It's the cold AND moist conditions seeds are exposed to that stimulate germination come spring. Stratification data is listed in the number of days to months necessary to speed germination. Take, for instance, the shagbark hickory. Seeds will need 3-5 months of cold stratification before they will germinate.

Scarification and Stratification Simplified

Winter itself provides the best scarification and stratification for seeds, with the freeze-thaw cycle helping to loosen seed coats so seeds can imbibe water in spring. Be sure to mark the spot in the garden so you can identify trees and shrubs once they've germinated. Keeping away squirrels and voles who'll eat the seeds is a good idea. A layer of hardware cloth or fencing with small openings can be placed above and below seeds to thwart digging. Once seeds have germinated, they can be carefully dug and moved to their permanent home.