

Shelton-Mason County Journal - Dedicated to the citizens of Mason County, Washington since 1886

Hang on slopey

Peninsula Permaculture · October 14, 2021 · Page A-7



By Alex Féthière

Photo in the print edition: Belts of clovers and alfalfa crisscross this hillside. (Journal photo by Alex Féthière)

A fortuitous coincidence of video and book gave me a notion to stack some functions: producing biomass above and below ground, holding slopes and making fertilizer in situ.

While watching Michael “Skeeter” Pilarski talk about alfalfa on YouTube, I recalled some advice from Patrick Whitefield’s “How to Make a Forest Garden.” Whitefield advised establishing “fertility plots” throughout your gardens and forest plantings.

These need only two deep-rooting, perennial plants to produce copious amounts of chop-and-drop organic matter for enriching the soil: alfalfa and comfrey. Mown or macheted, these provide several harvests of biomass annually to improve tilth.

They also contain the three macronutrients that plants need in a balance you can adjust. Alfalfa provides the bulk of the nitrogen while comfrey supplies phosphorus and potassium. It’s a good idea to cross-fertilize the patches with each other’s cuttings, just in case conditions dictate that alfalfa consumes the soil’s phosphorus and potassium in producing all that nitrogen.

Skeeter was holding forth on the soil-retaining properties of alfalfa. It’s commonly said that the roots can grow 20 feet deep, but he claims they can tunnel 150 feet down.

That started me from my chair because steeper parts of my property involve those kinds of altitudes. In many states, including Washington, alfalfa is often used to retain soil and prevent the development of gullies on plowed fields, while providing a useful hay crop.

Choosing a winter variety like Vernal means you can sow in fall and start cutting in spring. Such selections are bred to grow actively even as temperatures drop.

I should mention here (over the laughs of farmers) that much of the alfalfa grown in Washington is east of the Cascades, but I’m not growing it for hay. In companionship with comfrey, it seems uniquely suited to be a soil-retaining, perennial green manure crop — particularly for the deep-sand, part shade environments where I need it most.

Properly managed stands can live 10 years, and should be rotated with rye because alfalfa produces allelopathic chemicals that affect itself. Its autotoxicity can be overcome by tilling it in and waiting two

weeks before reseeding. Instead, I might try rotating it with a native grass, wild rye (*Elymus glaucus*).

MANAGEMENT

Concerned that alfalfa's deep roots would need a shallower mesh to support it until it had taken hold, and to reduce surface erosion, I broadcast alsike and crimson clover seeds over my on-contour alfalfa swaths. Alsike is also deep-rooted and self-seeding. Crimson clover is a winter annual that, like alfalfa and alsike, fixes lots of nitrogen. None of these will have to compete with weeds where they're going, which is good because they are no match.

I timed their planting, starting from mid-September, in hopes that by the time the bigleaf maples overhead lose their leaves, they will be able to catch some late-fall sun. Alfalfa benefits from calcium, which will be supplemented by the maples' leaves.

I was careful to buy inoculated seeds of all three cover crops. Though the rhizobium bacteria that fix nitrogen exist in our soils, the quickest start for these plants is to introduce the bacteria with the seeds. I was particularly concerned that nothing hosting rhizobium naturally exists where I was planting them.

All three cover crops have already rooted in the sand and will not dislodge in heavy rains. They were top dressed with compost, both to feed them and hide them from the birds.

I haven't seen Skeeter and Whitefield's thinking applied in this way. I know I'm going out on a slope, as it were. With belts of alfalfa and clovers wending the contours, it could hardly be more slippery than it has been in years past.

■ *Alex Féthière has lived on Harstine Island long enough to forget New York City, where he built community gardens and double-dug his suburban sod into a victory garden. He can be reached at onlandist@gmail.com.*