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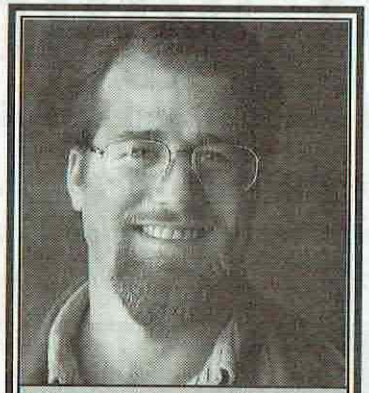
Mulch to retain moisture for your plants



Permaculture in practice

Nate Downey

After an unusually hot and dry winter and an extremely windy spring, finally Northern New Mexico has been blessed with the kind of nasty weather that locals can easily appreciate: rain!

Ten straight days of intermittent showers could signify the start of a wonderfully wet monsoon season. On the other hand, it could merely be reminiscent of last October when a couple of snowstorms had people predicting a wet winter.

Unfortunately, at this stage in meteorology's evolution long range weather forecasting looks a lot like surgery back when it was practiced by barbers and blacksmiths. The fact is that accurate long term predictions are usually just lucky guesses. Who can say whether the recent rains are a last "hurrah!" before a record drought or whether it is time to start building another ark.

Since one never knows when the next catastrophic event (or series of events) will come, wise land stewards take into account potential extremes as opposed to statistical averages. In the case of rainfall, we should consider Santa Fe's average of 12 inches per year to be less important than the years when we receive less than five or more than 20 inches of precipitation.

In permacultural terms this is called "designing for catastrophe". In layman's terms it is called overkill (until the big storm or serious drought comes along).

One of the easiest ways to prepare for extreme levels of precipitation is to lay down a thick blanket of mulch around plants and trees and on bare or unhealthy patches of soil. Mulch is any material that you place on the earth's surface which improves the soil's ability to support life. Straw, bark, compost and gravel are the most frequently used mulching materials.

One increasing popular product is the biodegradable erosion control blanket, a long roll of straw sandwiched between a coconut or jute mesh. Typically these blankets are unrolled over areas where seeds have been sown, then they are tacked down with long metal staples.

During extended periods of drought, mulch will retain moisture, prevent evaporation and create a microclimate for beneficial insects. During strong monsoons, mulch will control soil erosion by lessening the impact of precipitation and by reducing the powerful forces of sheet flow and head cutting.

One excellent reason to mulch is that the process illustrates the greatest of all permaculture principles, namely, "work is pollution." Since most mulch materials are light, inexpensive and easy to install, the energy output associated with mulching is minimal, while the payback is enormous.

By simply spreading a 3- to 4-inch layer of mulch (preferably on top of a 12-sheet layer of newspaper or a standard weed barrier), the conditions become ripe for natural processes to effectively do chores such as watering, tilling, fertilizing and weeding.

The time to mulch is now. Not that there's anything wrong with mulching throughout the four seasons. An annual roadside crop of garbage bags full of freshly raked leaves makes autumn an inexpensive time to mulch. Blankets of bark work wonders by keeping root systems warm in winter. And in spring a layer of straw "books," or "flakes," laid on the land helps prevent the damaging effects of our relentless wind.

But right now, with the impending possibility of summer storms and the intensified evaporation caused by the summer sun, mulching should be at the top any responsible landowner's list of priorities. Without mulch precious rainwater is wasted and whatever moisture that remains in the soil is lost to evaporation. Without mulch valuable flora withers and precious real estate washes away.

Nate Downey is president of Santa Fe Permaculture Inc., a local landscape design, installation and consultation company. He is an active member of the Permaculture Drylands Institute's teaching team and of the International Erosion Control Association. He can be reached at (505) 984-8881 or nate@sfpermaculture.com.