# **Pruning and Mulching**

By Brad Lancaster and the Dunbar/Spring Neighborhood Foresters

### The value

As the neighborhood forest grows regular pruning is required to keep pedestrian pathways, streets, and sight lines to traffic signs accessible throughout the public rights-of-ways. This way the public sees the forest as an asset, rather than a problem—and we can continue to grow the forest (figs. 1A, B). Where plants are not pruned, city-hired crews (untrained in plant identification or care) are often called in and they butcher or remove the plants—and we lose parts of the forest.

Pedestrian pathways must be kept clear to a minimum 5-foot width and 7-foot height, so two people, or a person and a pet, can walk or wheel side by side conversing (without having to bend over).



Fig. 1A. BEFORE pruning. Pedestrians have to duck. Photo credit: Brad Lancaster



Fig. 1B. AFTER pruning. Pedestrians have easy, clear access. Photo credit: Brad Lancaster.

And instead of throwing away the prunings and their nutrients, we can process and reuse them on site as a soil-building, water-conserving mulch (figs. 2A,B,C).



Fig. 2A. BEFORE. Compact, bare soil. Reproduced with permission from Rainwater Harvesting for Drylands and Beyond, Volume 2, 2<sup>nd</sup> Edition by Brad Lancaster



Fig. 2B. Capturing leaf drop and cut-up prunings in water-harvesting basin. Reproduced with permission from <u>Rainwater Harvesting for Drylands and Beyond, Volume 2, 2<sup>nd</sup> Edition</u> by Brad Lancaster



Fig. 2C. AFTER. Sponge-like, fertile soil. Reproduced with permission from Rainwater Harvesting for Drylands and Beyond, Volume 2, 2<sup>nd</sup> Edition by Brad Lancaster



Fig. 3A. BEFORE pruning vegetation in traffic-calming, water-harvesting chicane. Photo credit: Brad Lancaster



Fig. 3B. AFTER pruning vegetation in traffic-calming, water-harvesting chicane. Photo credit: Brad Lancaster



Fig. 3C. Some of the happy Work & Learn pruning party crew. Photo credit: Brad Lancaster

#### **Education and incentivization**

Workshops

The Dunbar/Spring Neighborhood Foresters takes participants to different parts of the neighborhood in need of pruning during our twice a year <a href="Hands-On-Pruning & Mulching workshops">Hands-On-Pruning & Mulching workshops</a> so they can learn by doing under the supervision of a certified arborist (fig. 4). Landscape design, arborist, and landscaper participants can also get continuing education credits.



Fig. 4. Certified arborist Aleck MacKinnon demonstrating how to prune a tree with pole saw in our Pruning & Mulching workshop. Photo credit: Brad Lancaster

So that the pruned biomass is not wastefully thrown away, we teach folks how to cut up their prunings with hand tools, such as loppers into 6-inch or shorter pieces (fig. 5).



Fig. 5. Cutting up prunings with loppers to make 6-inch or shorter pieces to use as mulch, which will be placed in bottom of street-side water-harvesting basin. Photo credit: Brad Lancaster

The shorter the cut-up pruning the more effective it is as a water-conserving and soil-building mulch as there is more soil-mulch contact and faster decomposition. It is also looks better. Larger prunings appear as a brush pile, not mulch, and they pose a fire threat.

# Chipping & pruning services

For those not able to prune themselves we offer a pruning service for a fee (minimum donation of \$30 to \$50 per site (range based on amount of pruning needed. This is an amazing deal, as this would ordinarily cost well over \$100 – \$200 per site).

Shortly after the pruning-workshop day, we will rent and operate industrial chipper-shredder to quickly turn prunings into mulch. To cover costs we ask for a minimum donation of \$30 per property for those using the chipper services. This is an amazing deal, as this would ordinarily cost well over \$100 per property. This service motivates people in the neighborhood to have their pruning done by the date of the chipping service.



Fig. 6. Chipping up prunings with industrial chipper. Photo credit: Brad Lancaster

The chipping service worked, but is a lot to coordinate and pay for with the rental of the chipper, and paying the operators. Rental is minimum \$300 per day. So, we had to get a good number of people committing to the service to make it affordable for all (by spreading out the cost). (We didn't always cover our costs, so \$50 probably should have been the minimum donation). So we came up with a cheaper and easier alternative...

### Service exchanging prunings for wood chips

What has been working better of late as it costs less and takes less coordination, is we offer a service to haul away the prunings—taking them to a local wood chipping and compost facility (Fairfax company's Tank's Materials), and then returning with wood chips from the facility. Minimum cost is \$20 – based on

### amount of prunings.

We hire one of our neighborhood foresters with a pickup truck and trailer to haul the prunings and mulch.

Bring a Tank's Materials dumpster to the neighborhood—for prunings only. Once full, Tank's Materials will pick up the dumpster and process the prunings into mulch which can then be delivered back to the neighborhood. We have not done this yet, because in our neighborhood any dumpster in a public space is rapidly filled with old furniture and trash. It might be an option if we could find a spot on private property with gate in the neighborhood where we could place and monitor the dumpster to ensure that only prunings enter it.

Scheduling Work & Learn Stewarding Parties before Brush & Bulky pick up Twice a year, the city offers a free scheduled service where bush and bulky materials left on the street curb are picked up and taken to the dump. Where neighbors want vegetation pruned, but are unwilling to pay for chipping/mulching the prunings, this is a cheap and easy option. (But unfortunately most of the biomass goes to the dump, though if we do the pruning 2 to 4 weeks before brush and bulky pick up there is enough time for most of the leaves on the prunings to dry and fall off—so the beneficial leaves stay in the neighborhood, while the larger woody mass leaves).

The Dunbar/Spring Neighborhood Foresters schedule Work & Learn Pruning parties through the four weeks preceding brush & bulky pick up. Those not participating in the pruning, but who still want pruning done, can pay a donation for the pruning service. We approach the adjoining properties of areas in need of pruning first.

#### **Evolving services for growing needs in the neighborhood.**

An aspect of our twice a year Pruning & Mulching workshop is how to prune trees to avoid conflicts with overhead utility lines. This enables the neighborhood to keep the trees, rather than losing them to the power company cutting them down. The need exists in the public right of way, and on private property. On private property the power company will not prune to clear power lines from trees – it is the property owner's responsibility. So, such pruning to clear tree branches from power lines on private property is another service for donation the Dunbar/Spring Neighborhood Foresters offers – focusing on elderly neighbors that cannot physically do the work, or low-income households that cannot afford it (figs 7A, B). The work doubles as a Work & Learn stewarding party opportunity.

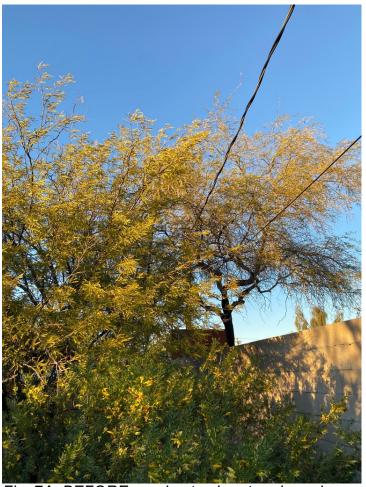


Fig. 7A. BEFORE pruning to clear tree branches on power lines. A fire threat. Photo credit: Brad Lancaster

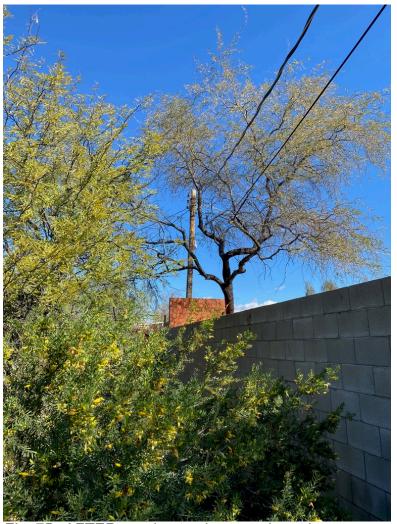


Fig. 7B. AFTER pruning to clear tree branches on power lines. Fire threat abated. Photo credit: Brad Lancaster



Fig. 8A. Pruning & Mulching workshop instructors and participants. Photo credit: Brad Lancaster



Fig. 8B. Chipping up prunings with industrial chipper. Photo credit: Brad Lancaster



Fig. 8C. Mulch from the chipped prunings spread out in water harvesting basins around the trees. Roof runoff from adjoining building directs its roof runoff to the tree basins when it rains. Photo credit: Brad Lancaster