**AGED 580**

**Greenhouse Renovations**

My greenhouse was almost nonfunctional when I started teaching. This is a list of items that needed to be addressed immediately.

* Electrical covers were unsafe and not located in the correct spots.
* Bench tops were “rolling” and had no function.
* No mist system
* No circulation fans
* Fan and pad were installed poorly
* Fans were located facing the lab area
* Weeds galore!
* Heater was a few inches from my head and right above the entry door.

What was fixed?

* All new electrical was run by the district electrician. All new covers were added and lights were checked.
* Benches were screwed to insure nobody go their hips crushed by a bench top rolling
* New mist system that can hydrate 10,000 cuttings at one time.
* Two new circulation fans were installed with proper electrical
* A new pad cooling system was installed after the fans were relocated on the back side of the house.
* All weeds were removed and maintained.
* Heater was relocated and all new gas lines installed.
* New plastic table tops were installed via a donation.
* New hose bib was installed

The mist system was not installed per manufacturer’s recommendations. I would agree that the spacing inline is accurate but I added an additional row and raised the heads twice as high per their specifications. It now works perfectly with the new timer and 24 hour clock. I found a 24 hr clock was the best option for me verses a photo sensor due to the house being so small. My heater tends to dry material out and I have to run a few cycles at night where a photo sensor wouldn’t allow the mist to cycle.

The pad system is a good alternative to an expensive galvanized one. Granted it won’t win a beauty contest, however it is very functional. There was a lot of “tinkering” to get it just right. What made life complicated was when we had to split the pad since the door was right in the middle. To get the water from one side to another an additional pump had to be installed with a float to turn it on and off. While the pad system is not perfect I would still recommend it.

