Notes from....



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From The Editor's Desk:

Last month's arena issue flew off the newsstands. So by popular demand, this month's will give more of what the public wants—weather science. Again keeping with our mission statement, "News you can use! Look out Tina Brown

Best Regards Matt Rayl

We are pleased to learn that Ashley Martin Dressage has added Lauren Cirignano to it's As of this team! January. Lauren has become available those of us looking to pursue jumping and/or working over fences for cross-training.

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Lauren has 16yrs of experience, working

with & underneath trainers such as Kim VerHage, Debbie Logan, & Rachel Stokes. She has successfully shown in the Arabian, Friesian, and Saddlebred circuits in disciplines ranging from dressage to saddleseat. Now Lauren is focusing this passion here at SCR, using combined training techniques to build a confident & successful horse and rider combination over fences.

They'll be hosting a "meet and greet" on January the 26th to roll out their expanded program. For further details: ashleymartindressage.com/Events.html

Feel free to contact Lauren through Ashley

Martin Dressage: Phone: (949) 636-3950

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Muck Raking

By Upton Sinclair

Orange County is considered a semiarid desert environment due to the relatively low levels of rainfall (12.89"). Along with the low rainfall, Orange County has fewer days of precipitation (33) than what is normal for the United States as a whole. For the stable, there is no difference between a 1/4" rain day and a 5" rain day. After a certain amount of rain the ground is saturated, and any additional amount runs off. So in a strange way, at the stable we don't measure total rainfall, but instead we count rain days. Ten straight days of 1/4" rain per day is far more disruptive to stalls and footing than one day of 5".

Chart #1														
	Jul	Aug	Sep	Oct	Nov	Dec	To Date	Jan	Feb	Mar	Apr	May	June	
Historical	0.01	0.08	0.27	0.36	1.32	1.99	4.03	2.53	2.73	2.21	1.01	0.26	0.07	12.84
2012-13	0.29	0	0	0.25	0.52	2.1	3.16							

Therefore a "wet" year for us is measured by rain days, not the total amount of rainfall, which is more the convention.

A rain season goes from July 1 through June 30. This way the rainfall in the winter is captured in a single "year". The first line in chart #1 (above) is the historical average amount of rainfall by month for our area. The

lessened, because each day shifts to more drying time as the days become longer.

Secondly, over the last several years, we've been increasing the size of the shelters. Using a 24' x 24' as an example, the previous shelters were 100 square feet. Of that area, half of the shelter drained into the stall, so the

Chart #2														
	Jul	Aug	Sep	Oct	Nov	Dec	To Date	Jan	Feb	Mar	Apr	May	June	
2012-13	2	0	5	8	8	20	43	3						46
											Historical Average			-33
											Over/ U	13		

second line is the actual rainfall the stable has received for this current year. As you can see, to date (as measurement of inches of rain) we're "dry" so far.

But remember that for the stable "wet" is defined as a precipitation day. The chart #2 shows this year's rain days since July. At the time of this newsletter, we've already had 46 wet days. Which means that if there were not a single drop all the way through June, this would be a very wet year, exceeding the normal amount by 40%. And yet we have not entered into the wettest months yet. Many folks visited the office wondering why their stalls were wet throughout December. This makes sense because in that month alone, we had 20 days of rain.

Even without 20 rain days, December can be a hard month for drying out because the days are much shorter. With less sunshine, the amount of time that the atmospheric temperature is greater than the dew point is far less. As we move into the next few months, the impact of the same amount of rain is

net effect is that the amount of area that rain water was directed to outside the stall went from 50 square feet to 256 square feet. These shelters are great at reducing the amount of rainfall during a storm. The down side is that they throw a big shadow onto the exposed area of the stall during December and January when the angle of the sun is quite low. As we move into February, the angle of the sun is more vertical and thus the shadow is reduced.

And lastly, we have planted only deciduous trees through out the stable. The idea being that these trees will shed their leaves in the winter, allowing more sun to hit the stable grounds. Unfortunately, our neighbors have planted evergreen trees. Therefore, when the sun is low during this time of the year, they create a shadow over a large portion of the grounds. It only takes a month when they no longer block the sun, and there is a noticeable difference. Their effect is definitely felt if December is wet.

Zen And The Art Of Stall Maintenance

By Robert M. Pirsig

To understand what is the best winterization strategy, always remember the single most important rule:

It's better to shed water than to soak it up.

Again, this is absolutely the rule to follow.

Now let's explore the wonders of winterization in depth!

Maintain Slope:

Every pipe stall is built in such a way that it has a minimum 2% slope. Over the years we have found that any less, and rain stays in the stall. How much is 2%? It's 6" of fall over 24'. Typically this means that from the gate under the shelter to the back, the height difference is 6". In a rain storm, if the proper grade is maintained, rainfall will flow easily out of the stall. Without survey equipment, how do you know what 2% is? That's easy; just follow the angle of the pipe rails which have been set at the proper angle.

It is also important to remember that drainage flow is not directly out the back, but typically is diagonally out of the stall. This allows not just an individual stall to drain, but for the whole block of stalls to drain. Building walls, dams, mounds etc. of stall footing to prevent your upside neighbor's water from flowing into your stall is unfair. That's because you are also sending some of your rainfall into your downside neighbor's stall. So maybe 20% of the upside stall's water is draining into yours, but then you're sending 20% of yours into the downside neighbor. Anyways the net effect is zero as you cancel each other out.

The other issue arising from building dams / walls, is that you're actually trapping the water in your upside neighbors stall, thus preventing the drainage and putting their horse at risk. Remember that not only is your stall draining, but the block of stalls also has to be put on a

slope so once the water from the individual stalls drains out, then all that water must then leave the block of stalls.

For those 24' x 24's in the middle of the stable that face the creek (#'s 1-10, 23-33, 46-58) your stalls are a little different. We'll put the lightest bump in the center that will direct the water to the outside of the stall where it can safely exit. Don't feel that you've been short-changed. Because of the configuration of these stalls, and the angle of the winter sun, these stalls receive the most sunlight, and will dry out the fastest. As we have increased the size and slope of the up-slope shelters, significantly more rain water is diverted into the aisle and not to the down-slope stalls. These stalls now will often do the best in the rainy winter.

Pack it hard.

The harder the surface of the footing, the faster the water will shed off. In a dream world, your stall's footing will be like concrete (when it rains) so that water will quickly run off. The faster the water leaves, the more time that any remaining moisture can evaporate between storms. Then, when the next storm comes, the footing is hard, dry, and smooth. Thus the next storm's water quickly runs off. Life just get's better and better.

This cycle can also work in reverse. If a stall gets muddy, it will get worse because the surface is unable to be restored in between storms. First the horse tromps in the footing creating deep depressions. Then the next storm comes along, and the depressions fill up, resulting in even more water being trapped. The footing is now muddier and consequently gets even deeper depressions. With each rain event, it get worse.

By taking a few minutes each day (and especially after a rain event) and raking your stall to fill in any hoof prints, you'll be developing a solid footing for the next storm. Remember that your horse's hooves are very heavy and they will compact the soil in

whatever shape it's left in. If raked even and smooth, it will compact even and smooth. Leave it uneven, and that's what you'll get, only harder.

The importance of soil / footing compaction can't be emphasized enough. When soil is loose, it contains many pockets of air. These same pockets then fill up with water when it rains. Because the water is below the surface, it can't run off. The only way to get rid of it is through evaporation, and this takes quite awhile. Remember that only a very small amount will percolate down into the subsoil. So don't think that is your exit plan. Over the years we have tried all manner of drains and seepage pits. They all fail quickly. Again the primary objective is to shed the water off.

Shavings Usage

Given the above, hopefully you'll see that putting shavings to soak up wet stalls is not advisable. Placing shavings in exposed areas acts as a mulch that prevents moisture from evaporating or running off. Shavings also degrade and this raises the bacteria level which leads to thrush. Lastly, shavings create small voids in the soil which also hold more water than if there none. The emotional rush of dumping a few bags of shavings to make the stall smell and look pretty, ultimately will prevent the water from flowing and from evaporating. Down the road this will create an even bigger problem. Shavings do play a role if they are kept under the shelter.

In the past we cautioned about the use of shavings during the wet months. Now that the shelters are much larger, feel free to bed under the shelter. By encouraging your horse to remain under cover, your horse will make less trips outside. This means fewer hoof prints and less water retention. Now that all the waterers have been moved under the shelter, your horse can eat and drink in the dryness, and have less reason to go outside.

FAQ

What do I do if for some inexplicable reason my stall turns into a mud pit?

First of all, several hours of self-flagellation is a good start. Now that that's over, you may be tempted to dig out all that mud until you hit bedrock. That's all well and good until the next rain, when now your stall becomes the local swimming hole. If there is enough of a break in the storm pattern, it's best to rake your stall and allow it to compact. You might also consider adding some birds' eye gravel to "thicken" up the mush.

If digging is the only action that will still your heart, then the ultimate answer is to fill the pit you've dug with 100% bird's eye gravel. Since it won't have time to compact, you're better off filing it with a material that can support the weight of your horse.

Here' a brief synopsis of other products that may show up in an especially heavy REM stage:

DryStall: The all-mineral pumice like material provides some cushion, and more importantly won't decompose. It does eventually get ground up and turns finer and finer, eventually disappearing. I give high marks to the marketing department of DryStall for such a great name, but it is not the solution to muddy problems Remember that the primary rule is to shed water, not to trap it and have it percolated. DryStall does fill voids, and doesn't decompose.

Shavings:

Micro-Shavings - Do not use when it's raining!!!

Mini- Shavings -While not as bad as micro's <u>if</u> you can keep all of them under the

shelter you're probably ok.

Regular - Of all the pine based shavings, the large size of these are the best.

Rice Hulls. Since the hull's job is to protect the seed, rice hulls tend to hold less water than the micro-shavings. Some folks like these, and others don't -probably better in the summer.

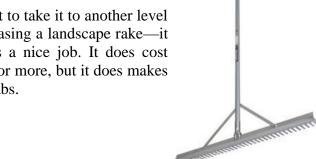
Cedar Shavings are a good alternative to pine shavings. The cedar resists decomposing and thus the bacteria level is far lower. Less bacteria = less thrush.

What is a good rake to use in my stall?



Home Depot / Lowes sell cheap garden rakes like this one.

If you want to take it to another level then purchasing a landscape rake—it really does a nice job. It does cost about \$30 or more, but it does makes for flatter abs.



A word of caution for those with OCD; the goal is to fill and flatten the stall. "Really going at it" will make things worse because over raking creates air pockets, and remember these hold water. This is especially true if your sweat starts to create mud. Just a few minutes each day is enough. . . . You're better off washing your hands instead again.