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Recognized, Respected, Recommended

October 2013

Horse Manure Management

Closeness of storage site to water and neighbors: Manure should be stored away from places where runoff may enter streams or flooding may sweep away manure. Manure should be placed:

- more than 200 feet from surface water and private wells
- at least 500 feet from public wells
- away from property lines (this depends on your local planning and zoning commission but must be at least 50 ft or more away from property lines in some states)
- away from a residence

Size of storage: On average, a horse produces 40-50 lbs of manure/day, 7-9 tons/year! To calculate the amount of storage you will need, measure the average daily waste (manure and bedding) and multiply that amount by the number of days between planned removal for disposal or utilization. For example, for the average 1000 lb horse, you will need 12 yards of storage space. One cubic yard is equal to 27 cubic feet, so you will need 324 feet or an area roughly 9 feet long by 9 feet wide by 4 feet deep. Also remember when designing the space to consider what sort of equipment you will be maneuvering to access the manure. Options to consider:

- covered dumpster
- 3 walled structure with roof or tarp cover
- 3 bin compost system with cover
- covered or enclosed truck bed or manure spreader
- concrete pad with one or two walls
- for small facilities, trash cans with lids

Water management: gutters and diversions keep clean water from entering the barnyard or manure pile. A cover or tarp should be used to keep rainwater out of storage. Using a concrete pad on the bottom of the pile will help protect groundwater and make manure disposal easier..

Composting: will increase the value of manure, kill parasites and weed seeds, and decrease the volume of waste. Compost piles should be located away from buildings since they may spontaneously combust. Piles must be turned either on a weekly basis or based on the internal temperature of the pile. Passively aerated piles are not turned but have perforated pipes placed in the pile. Internal temperatures of compost should reach about 140° F. A minimum pile size of 4 feet by 4 feet by 4 feet is needed to achieve

composting temperatures. A 3 bin system can be used on smaller farms or windrows (long, free-standing piles) can be used on larger farms. Some guidelines for composting are:

- Piles should be turned when temperatures fall below 110° F or above 140° F
- Base width of the pile should be twice its height
- Moisture content should be that of a wrung out sponge (30-40% dry matter)
- Finished compost will have a soil-like texture and smell earthy
- The process can take as little as 3 months with frequent turning

Spreading: Some things to keep in mind:

- Nutrients in manure and availability to plants
- Time of year –It is ideal to spread manure in the spring so that you minimize potential losses before the crop can take it up and nutrients are supplied for the upcoming growing season.
 Spreading in the fall is also a good idea.
- Methods of spreading
 - Manure can be spread with a tractor and spreader for ease of spreading. Other methods can be employed but may be more labor intensive. You might consider purchasing equipment with a friend or group of friends if it is cost prohibitive for your budget. Compost can be spread as ½ to 1 inch thick and then mixed well into the soil.

Disposal: There are several options for disposal:

- Rent a dumpster from a sanitation company and have it removed on a regular basis.
- Have a local farmer or landscaper remove manure or bring manure to him/her on a regular basis. A hydraulic dump trailer can make delivery easier.
- Give manure to family, friends, and neighbors for use in gardens or landscaping.
- Use manure or compost on crops and hay fields. If using uncomposted waste, remember that nitrogen depletion of the soil may occur as bedding materials are broken down.



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- Oct 4-5, Mojave Mojave River GPS/Poker Ride and Cattle Drive, historical Mormon Trail between Hinkley & Helendale, Maarten Verwey at 760-559-4555 or myerwey@sbsar.org
- Oct 4-6, Burbank North American Peruvian Horse Association National Show, Los Angeles Equestrian Center
- Oct 5-6. Del Mar Signature VI County Horse Show, takes place at Horsepark, the Fairgrounds' equestrian facility, robinserfass@cox.net
- Oct 5-6, Agua Dulce Dianne Olds Rossi Cowboy Dressage Clinic, Weber Training Stables, www.webertrainingstables.com, Morgans12@prodigy.net
- Oct 6, ETI Buckle Series, Presented by Equestrian Trails, Inc., Corral 50, Linda Morris (951) 940-0054 sindagrandma@earthlink.net
- Oct 6, Semi Valley High Point Show, Corral 118, Terri Meadows (805) 582-1149, shortstirrups@sbcglobal.net
- Oct 10, San Marcos Horse Heritage Festival, Twin Oaks Valley Equestrian Association, Walnut Grove Park, info@keepitequestrian.com
- Oct 10-13, Del Mar Showpark Fall Festival Horse Show, takes place at Horsepark, the Fairgrounds' equestrian facility, 858-481-9085, www.showpark.com
- Oct 12, Devils Punch Bowl Ride, Presented by Equestrian Trails, Inc., Corral 86, Irving Blank (661) 268-0098, irving@phwsinc.com
- Oct 13, Sylmar K.E.C.S.A. Horse Show, Hansen Dam Equestrian Center, TRC office 714-848-0966, www.trchb.org
- Oct 13, San Marcos San Marcos Trails Day: 7th Annual Poker Ride 'n Stride, Heritage Park Open House
- Oct 13, San Juan Capistrano Jumper Classic, Rancho Mission Viejo Riding Park
- Oct 19-20, Del Mar Showpark County VI Horse Show, takes place at Horsepark, the Fairgrounds' equestrian facility, 858-481-9085, www.showpark.com
- Oct 23, 7th Annual Fall Festival, Hosted by El Camino, vandi.reeves@yahoo.com
- Oct 23-27, Del Mar Spooktacular Halloween Dressage Show I and II, takes place at Horsepark, the Fairgrounds' equestrian facility, www.sandiegodressage.com

If you have an event that you would like me to include in an upcoming newsletter, email me the information at

Devon@RanchAndEstateHomes.com

Quantity and Weight

Horses produce about eight piles a day and about 50 lbs a day. That means one horse creates about nine tons of manure per year. This is why stall and pasture cleaning is essential to horse health. If manure is not cleaned up regularly it makes the perfect environment for producing unhealthy ammonia fumes in stables, as well as a place for moulds, bacteria and parasites to thrive.

Ingredients

Horse manure contains grass and grain fibers, minerals, shed cells, fats, water, sand or grit depending on the type of soil the hay or grass was growing in. About 3/4 of the total weight of manure is water. It may also contain undigested grain and weed seeds, which is why it should be composted before putting on gardens.

Manure By Any Other Name

Horse manure is sometimes called buns, road apples, horse pucky, horse chips, horse hooey and horse apples.

Horse Manure in Your Garden

Horse manure should be aged about six months before using on gardens. Manure tea made with fresh manure can be used to feed vegetable and flower gardens or fresh manure can be used to build a 'lasagne garden'. It doesn't burn the plants, so even if you don't let it compost for six months, you're not going to kill your plants.

Horse manure should be a pile of roughly spherical shaped droppings. These are formed by the last portion of the large intestine squeezing the contents into ball-like shapes as it extracts water.

If You Fall Face First in a Pile

Horse manure is unlikely to spread disease to people, including bacterial problems with e-coli which is killed in sunlight. Human and dog waste are far more likely to spread disease and parasites to humans.

Color

Horse manure changes color and consistency depending on their diet. When the horse is on grass, or very bright green rich hay, the manure will be a bright green color when fresh. If the horse is eating paler green hay, the manure will be paler and if the horse is forced it eat brownish hay, the manure will be a similar color. Outdoors, the weather bleaches it all brown eventually.

If It Stinks

Horse manure is not as smelly as cat or dog feces. Most people do not find it overly offensive. Particularly foul smelling manure could be caused by a rapid change in diet, too much fat or protein in the diet, ulcers, salmonella or C Diff, or internal parasites.

Fuel

Apparently dried horse manure makes good fuel. You probably wouldn't want to roast marshmallows over it, but it has been used as heating fuel. You can make horse manure bricks to burn as fuel and claims it has a higher heating value than seasoned hardwood. Plus, the resultant ash is an excellent soil additive.



TRADITIONAL SOUTHWEST HACIENDA

Classic southwest designed, single story home on over 4 acres with spectacular panoramic views. Southwest touches included distressed wood beams and headers, rounded corners throughout, built in niches and arches, open floor plan, rich colorful tile counters in the kitchen, Saltillo tile flooring. Horse facilities include 2 covered stalls with feed storage, corral and direct access to miles of dedicated trails on the Dailey Ranch. | **Offered at**



& Available Properties &



JUST LISTED!! Wooded Retreat On Quiet Cul-De-Sac, Escondido - Custom single level home, 2,511 Sq. Ft., 4 Bed/2 Bath, 1 acre lot, Light & bright throughout, vaulted wood beam ceilings, large great room, Pebble Tec pool w/ waterfall, Horse Facilities Include: (2) three-sided enclosures, separate tack and feed room, large turnout with lovely shade tree, room for horse trailer and turn around space...Offered at \$742,500







Designated for Training or Vet Care, Fallbrook - 3 Bed/3 Bath, 1,608 Sq. Ft. updated manufactured home, on, 4.9 Fenced Acres, Turn Key Horse Facilities: dressage arena, schooling arena, 9 stall Barn w/ room to add additional stalls, tack room, hay barn w/ shop & full bath, 1/4 mile jogging track, Grass turn outs, watering systems, Trailer parking, Extra living area for foreman, customized drainage, MORE!......Offered at \$799,900

> Lots & Land ≪





For a private viewing of any of these homes or to receive a FREE market analysis on your home call Devon at (760) 522-8559





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My business is built on your referrals! I focus 100% of my energy on my clients and in return I depend on you to refer your family and friends to me. If you are genuinely pleased with my services, the greatest compliment you can give me is a referral. Referrals are what determine my success...one home at a time, one friend at a time, one client at a time. I thank you for your trust and sincerely hope you will tell your friends, family, neighbors and co-workers about my services. If you know someone who is thinking of selling or buying a home, please have them call me at:

760.522.8559

Thank You For Your Referrals!

The Real Estate Corner

August 2013 County Sales and Price Activity (Regional and condo sales data not seasonally adjusted)

August-13	Median	Median Sold Price of Existing Single-Family Homes					Sales	
Southern California	Aug-13	Jul-13	Aug-12	MTM% Chg	ry% Chg	MTM% Chg	YTY% Chg	
Los Angeles	\$444,950	\$421,350	\$344,770				-5.9%	
Orange County	\$664,580	\$675,000	\$567,710	-1.5%	17.1%	-8.0%	-5.0%	
Riverside County	\$290,030	\$294,300	\$227,740	-1.5%	27.4%	2.1%	-4.4%	
San Bernardino	\$183,240	\$180,270	\$143,470	1.6%	27.7%	7.8%	2.0%	
San Diego	\$482,470	\$483,800	\$389,540	-0.3%	23.9%	-2.8%	-4.3%	
Ventura	\$555,560	\$545,720	\$437,880	1.8%	26.9%	-0.8%	-4.6%	
August-13	Invent Inde	x		Time on Market				
Southern California	Au	g-13 Jul-13	Aug-12	Aug-13	Jul-13	3 A	ug-12	
Los Angeles	2.9	2.9	3.0	31.1	28.7	44.6		
Orange County	3.3	3.0	3.6	46.3	43.2	57.3		
Riverside County	3.2	3.1	3.2	36.6	34.6	46.1		
San Bernardino	3.0	3.1	3.4	29.8	29.5	40.4		
San Diego	3.4	3.3	3.7	24.4	23.5	40.2		
Ventura	3.2	3.5	4.0	46.9	41.6	56.0		