## Simple New Air Cleaner **Keeps Buildings Dust-Free**

"Simple gets it done," says Patrick Sheehan about the air filtration system he developed. But the simplicity of his Demo Air Net took about five years of testing different fabrics to find the one that traps particles as small as 5 microns. That makes it ideal to work in any place with dust, debris and particles - from workshops to barns to homes under renovation. Set up is simple: slip the net/filter on the discharge end of a fan, and secure it with a bungee cord.

"I wanted it to be very durable, washable and as effective as possible," Sheehan says. It's also important to him that the Demo Air Net is made in the U.S. and sells for a reasonable price at \$30 to \$80 for small to large sizes.

The former Marine Corps jet mechanic learned about moving air while in the service. As a disabled veteran, he now specializes in renovating buildings from the 1800's, which are filled with coal dust, sediments and other nasty particles.

"I use a big fan to outpace the rate of contamination," Sheehan says. "Look at the size of the area, figure out the cubic feet and find a fan that matches or exceeds the cubic feet." By using a lot of air, his nets capture pollutants before they break down to even

smaller pollutants. The net filters an assortment of particles - dry wall, barn dust, concrete dust, animal hair and even volcanic ash.

'The key thing to remember about the fan is that it must be elevated on a stand and have variable speed," Sheehan says. He's partial to Ventamatic fans, which are made in Texas.

He has nets for fans ranging from 9-in. dia. to 42-in. fans for very large areas. The nets are machine washable, and Sheehan has used some for four years.

"Put this in a room, and it takes control of the air space. It's like a massive vacuum keeping the air clean," Sheehan says.

## Hay Bale Garden Failed This Year

Planting vegetables directly into hay bales didn't turn out as well as Jeri Stewart hoped it would, but she blames it on the abnormal weather this summer. The Ava, Mo., gardener and her husband, Kevin, are disabled and liked the idea of having a taller garden to eliminate bending. They tend a 2,400-sq. ft. garden and sell produce at a farmers market.

Initially, Stewart heard about growing potatoes in loose hay, and thought it would make harvesting them easier. When someone offered to give them 150 bales of hay that had been rained on, the Stewarts decided to experiment with other vegetables, too.

Kevin built 4-in. tall open-bottom planter boxes to set on blocks of four bales placed in a square, string sides around the perimeter. He added old garden soil, peat and composted manure from the couples' chickens. The idea was that the roots would grow into the hay, which would retain moisture.

Unfortunately, it was a very wet spring.

"The hay tends to kind of melt with the rain," Stewart says. The hay shrunk unevenly and it was difficult to keep the boxes upright.

The weeds also thrived in the hay and, because the bales sagged, the Stewarts had to bend over to pull them. Triple-digit heat later in the summer also took its toll on the bale garden.

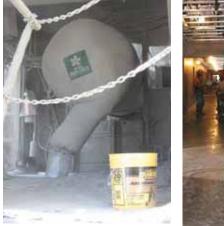
"I've never seen this high of heat for this long," Stewart says, adding that with the hot, dry days came bugs in numbers they had never seen before. "We lost plants so we sprayed, but we're still losing plants."

The Stewarts watered their bale garden every day, but most vegetables didn't do very well. The zucchini only lasted a couple of weeks. Acorn squash "baked" in the heat. Pattypan squash did the best.

Tomatoes did the best of all the vegetables - (10 lbs. off five plants in one picking), but only after the Stewarts sprayed them for blister bugs and beetles.

'Strawberries were iffy," Stewart notes. Keeping them weeded was a losing battle, due to the weed seeds from the hay bales. Pulling weeds also pulled up strawberry runners, requiring a lot of extra bending to replant them. As for potatoes, they do seem to be doing fine in the loose hay. New potatoes have been easy to harvest.

"The hay breaks down too fast in heavy rain," Stewart says. She notes that straw may have worked better as it doesn't break down as easily. However, at \$4.50/bale, that isn't



Air cleaner's filter/net fits over discharge end of a fan and is secured with a bungee cord. It can be used for everything from workshops to barns and homes.

Sheehan, Demo Air Net, P.O. Box 124, Morse demoairnet.com).

Contact: FARM SHOW Followup, Patrick Mill, Mo. 63066 (ph 636 221-0284; www.



Jeri Stewart and husband Kevin tried planting vegetables directly into hay bales. How-ever, this year it didn't turn out as well as they hoped it would.

"I think we will go back to planting in the ground with black plastic mulch," Stewart says.

Contact: FARM SHOW Followup, Jeri Stewart, Rt. 2, Box 615, Ava, Mo. 65608 (ph 417 683-1363).

## **Belly Mower Makes A Great Side Winder**

"My homemade 72-in. sidewinder mower can cut road ditches at a 30 degree angle and I never have to worry about driving my tractor off the level road," says Jerry Scott of St. Helena, Neb. Scott built his versatile sidewinder mower from a conventional belly-mounted 6-ft. finish mower using good old-fashioned home shop ingenuity.

"I found a 3-pt. carry-all that fit real well on my 35 hp Kubota," Scott says. "Then I figured out a lift mechanism, and a drive system so the mower rides on the right side of the tractor. I built reinforcing brackets and attached the mower so when it's in a flat position on the ground it sits just outside the right rear wheel of the tractor. I adjust the mowing height and angle with a 3-in. by 3-ft. cylinder. The cylinder mounts to an adjustable chain that provides about 3 ft. of up and down travel.'

To power the mower, Scott initially used one belt through a double pulley system. "I found out pretty fast that wouldn't work," Scott says. "The belt was tough to keep tight, it shredded and since it costs \$140, I knew I'd have to come up with a different plan."

His new design included moving the mower gearbox from the center of the mower

to a bracket on the far left side of deck. The tractor pto shaft reaches the gearbox and flexes when the mower is raised or lowered. At the base of the gearbox a second pulley drives the mower pulleys. "Since the whole drive mechanism is mounted to the mower. the belts run tight when the mower is level or angled and I haven't broken a one," Scott says

"This mower does a great job on the level or on angled ditches," Scott says. "I use it in my yard and down the township road. The gauge wheels keep the mower level and the mower's 24-in. heavy-duty blades cut grass up to 6 in. tall and make it look just like a smooth lawn.'

Scott's project cost about \$500 out of pocket, plus labor to make the brackets and develop the new pulley setup. "I looked into buying a mower like this and the cheapest one I could find cost almost \$5,000," Scott says. "That was way more money than I wanted to spend. I found the used belly mower for \$250 and the other \$250 was for pulleys, belts and miscellaneous parts.'

Contact: FARM SHOW Followup, Jerry Scott, 55746 898 Rd., St. Helena, Neb. 68174 (ph 605 661-2957).



Six old tractor weights mounted to the left side of the 3-pt. frame counter balance the 72-in. mower when it's in a raised position.





Mowing steep road ditches isn't a problem for Jerry Scott with this sidewinder mower that he made from a conventional 72-in. belly mount. His rig has 3 ft. of up and down travel and can mow 30-degree angle ditches.

an economical option.