

## Silage Blower Moves Leaves Fast

Doug Firebaugh doesn't mess around when it's time to clear leaves. Faster than a crew of men can rake leaves up, he has them loaded into silage wagons for delivery to local farmers.

"They use them for bedding, and we get rid of them," says Firebaugh, who uses the rig at a local church camp. "We have up to 40 people raking and fill five to eight wagons each fall."

His modified silage blower is key to the rig's success.

"We get piles of leaves that are as high and wide as cars," says Firebaugh. "I pull up alongside, let down the ramp, and two men on either side rake the leaves into the blower."

The old Gehl blower was originally set in line with its frame and axle. Designed for self-unloading chopper boxes, it had a hopper that

fed silage to the blower. Firebaugh cut away the old hopper and modified the mouth of the blower with a hood and a plywood ramp. The hood catches leaves being raked at the blower mouth, and the ramp can be lowered or lifted up and locked out of the way.

He shifted the blower unit perpendicular to its frame so the pto shaft could run off the tractor that pulls it. He also built a hitch on the rear of the frame so the unit could pull a silage wagon. A section of blower tube directs leaves into the wagon.

Firebaugh prefers the rake-in blower to a vacuum style leaf mover. He notes the vacuum tubes are too easy to plug, which was a problem with an earlier leaf mover he built. This one, he says, moves leaves and twigs and moves them fast. He can also move the leaf mover fast.



**Modified silage blower works great for clearing leaves, says Doug Firebaugh. Leaves are loaded into silage wagons for delivery to local farmers, who use them for bedding.**

"The rubber tires trail well," says Firebaugh. "I can pull it down the road at 50 to 60 mph."

Contact: FARM SHOW Followup, Douglas Firebaugh, 697 N. Harlem Center Rd., Freeport, Ill. 61032 (ph 815 232-6341).

## High Capacity Yard Vacuum

When there's a lot of leaves or grass clippings to collect, Maurice Leighton's homemade system gets the job done fast.

He modified a commercial "Billy Goat" vacuum by replacing the bag with a higher-capacity drum collection system.

Leighton pulls the Billy Goat behind his riding mower, and behind that, he hitches a large collection drum. He uses an inner tube as a flexible passageway for the leaves between the Billy Goat and the drum trailer. The Billy Goat's gas motor powers the unit.

He made the drum by bolting two plastic 50-gal. drums together, and cutting out several screened vents along the top, from which air can escape. The vents are covered with 1/2-in. mesh.

"The drum sits on an axle with two 10-in.

dia. salvaged tires and has a hinged, plastic, vented door that lifts up on the back end to dump," he explains. "To unload, you open the door (which folds back parallel to the top of the drum), unhook and tip the hitch up manually, and it self empties."

"This leaf collector is effective for large areas with only leaves to be removed," Leighton says. "It's not practical with a lot of twigs which would block the suction inlet."

The whole system was low cost except for the Billy Goat, which was a few hundred dollars.

Contact: FARM SHOW Followup, Maurice R. Leighton, 6560 Lindberg Ave., Placerville, Calif. 95667 (ph 530 626-0965).



**Maurice Leighton modified a commercial "Billy Goat" vacuum by replacing the bag with a higher-capacity drum collector. He pulls it behind his riding mower.**

## He Got Hooked On Backyard Tilapia

You can have year-round fresh fish without a lot of work, says Edgar Sanchez, who got hooked on backyard tilapia. In a few short years he has gone from a few fish in an aquarium to breeding, feeding and eating tilapia from his backyard fish farm.

"I decided to use my aquarium for something I could eat," recalls Sanchez. "I started with a colony of six female Tilapia and two males. Today I have 1,500 fish of all sizes, from fingerlings to 3 lbs."

Most tilapia don't make it past the 1 1/2 to 2-lb. weight that makes for prime eating. He has been sharing his excess with family and friends while developing a breeding population and refining the two distinct breeding lines needed for small scale tilapia production.

"You don't want any females in a tank, as they'll start breeding, and the tank quickly gets overcrowded with fish of all sizes," explains Sanchez. "It's more convenient to keep fish separated by size and only raise males."

He explains that large operations will often feed hormones to their tilapia to turn females into males and restrict breeding in the growing ponds. That isn't feasible for him.

Sanchez's supplier and mentor, Mike Sipe, developed two lines which when crossed produced only males. Sanchez has been purifying the two lines. He reports producing three generations of all male fingerlings from crossing the lines and is now ready to sell colonies with six females from the one line and a male from the second line.

Sanchez has also developed a simple backyard system for interested customers. It consists of a 125-gal. breeding tank and 29-gal. delivery tanks where the young fry are spawned and get initial growth. The third stage is to move them into one of six 8-ft.

diameter children's wading pools where they are fed to maturity. Finally Sanchez moves them into his "catch of the day" tank where they are held until eaten or given away.

"Tilapia are perfect for small producers because they are easy to control," says Sanchez. "Just keep the water in the breeding tank at 75° or lower if you don't want them to breed."

Sanchez explains that the 1/8-in. babies eat only micrograms of food a day while the 2-lb. tilapia can consume up to 16 grams, or a little more than half an ounce of food per day. He says they can grow from birth to 2 lbs. in eight months on only 2 lbs. of feed.

"The key is to keep sampling every day for weight to give them the right amount of food and make sure they get plenty of oxygen and clean water," says Sanchez.

His filtration system is a combination of homemade and purchased items. Smaller tanks, including the final 40-gal. tank, are filtered by their water pumps. Water from the 6 large growing tanks is pumped into a 5,000-gal. tank. A pump at the bottom pumps the water to a large garbage can where most of the fish waste settles out. A PVC drain in the garbage can allows him to drain solids, while the water goes through a series of filters before being returned to the growth tanks.

Sanchez makes use of rainwater collected from his roofs to supplement city water for his fish tanks. To heat the water, he relies in part on a coil of black hose covering an old satellite dish. City water pumped in one end comes out the other at near boiling point temperatures on a sunny day.

A bug zapper over the pools drops treats into the tanks. Even the fish waste is used. "We have the greenest trees in the neighbor-



**In just a few years, Edgar Sanchez has gone from a few fish in an aquarium to breeding, feeding and eating tilapia from his backyard fish farm. He has also developed a simple backyard system for interested customers.**



hood," says Sanchez. "It makes very good fertilizer."

According to Sanchez, the most difficult part of getting a tilapia farm established is permitting. He urges people who are interested to contact their state department of ag and/or their department of natural resources. He says the key is to declare your intentions to be a commercial supplier. Some states like Florida won't allow tilapia to be kept as pets for fear they will be turned loose. Even states like North Dakota, where tilapia couldn't survive the winters, prohibit keeping them as pets.

"Once I registered as a business, I had no

problem," he says. "I would have to get a whole lot bigger to supply restaurants, but for now I am set up to sell breeding colonies."

Registration means he can't sell breeding colonies to anyone who doesn't have approval from their state. A 7-fish breeding colony is priced at \$399 with shipping costs estimated at \$100 to \$150.

Contact: FARM SHOW Followup, Edgar Sanchez, 5418 Glasgow Ave., Orlando, Florida 32189 (ph 407 352-6620; customerservice@tilapiafarmingathome.com; www.tilapiafarmingathome.com).