



Treat your manure.

Unleash the profit!



Possible Earnings Per Year

Example based on a 1,000-cow dairy:

- ▶ **Nitrogen fertilizer:**
Minimum savings of \$29.60 per acre. A 500-acre farm would pocket \$14,800 per year.
- ▶ **Animal loss due to slippery floors:**
At 1% animal loss per year, savings of \$20,000 for a 1,000-cow dairy.
- ▶ **Manure handling costs:**
Avg. \$150 per cow per year = \$150,000 for a 1,000-cow dairy. Now able to irrigate year-round, reduced off-site hauling, no agitation costs (time, electric & equipment), easier pumping (increased pumping from 900 gal./min. before treatment to 1,200 gal./min after treatment). Estimated annual earnings of 25% = \$37,500.
- ▶ **Better crops**
- ▶ **Methane collection:** Pro-Act's system facilitates methane collection; use it as an energy source or just burn it off and benefit from the carbon credit.
- ▶ **Less manpower:** Simple to use, little machinery involved.
- ▶ **Higher employee morale, less worker's comp costs.**
- ▶ **Better neighbor relations, less legal costs.**

Total quantifiable profit: \$72,300

Example of Cost for System

Example based on a 1,000-cow dairy:

- ▶ Startup costs for current inventory:
3-million gallons @ \$2,000/million = \$6,000
- ▶ Diffuser rental:
@ \$100 per month + startup costs = \$5,100 total for 3 diffusers
- ▶ Treatment cost per year:
\$12,000 (\$1,000 per month)

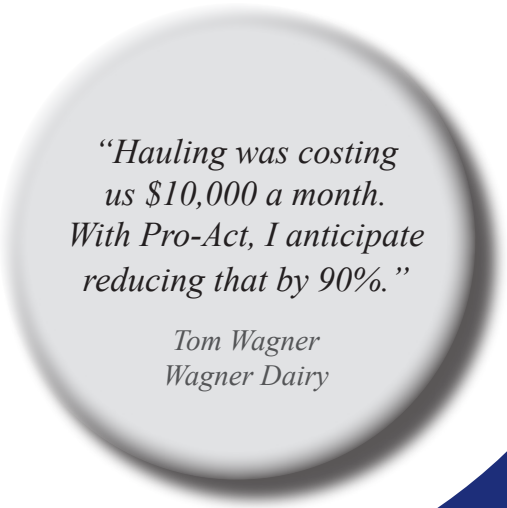
Annual cost 1st year: \$22,100

Net profit for 1st year: \$50,200

Annual cost after 1st year: \$15,600

Net profit after 1st year: \$56,700*

*This is an example based on averages from current customers. Contact us to find out what you can expect to save per year.



"Hauling was costing us \$10,000 a month. With Pro-Act, I anticipate reducing that by 90%."

*Tom Wagner
Wagner Dairy*



1-800-772-3775
www.ProActMicrobial.com



Stratify Your Lagoon

	Total-N	Ammonium-N	Phosphate	Potash
Top Water	8.6	6.3	1.7	10.25
Bottom Water	17.6	7.8	10.5	12.4

- ▶ **Top water can be used for irrigation**
- ▶ **Only nutrient-rich bottom water needs to be hauled to outlying fields**
- ▶ **Buy less fertilizer**
- ▶ **Little or no agitation will be needed**

Buy Less Nitrogen Fertilizer

Nutrient composition of dairy lagoon top water/effluent (lb/1000 gal)

	Total-N	Ammonium-N	Organic-N	Phosphate	Potash	Ammonium-N/ Total-N
Pro-Act Treated Manure Top Water	8.6	6.3	2.3	1.7	10.25	0.73
Range	(7.7 - 10.8)	(5.8 - 7.2)	(1.6 - 3.6)	(1.2 - 2.2)	(8.7 - 12.3)	(0.67 - 0.79)
National Average¹	4.1	2.6	1.5	2.5	5.8	0.66

- ▶ **Minimum savings of \$29.60 per acre. A 500-acre farm would pocket \$14,800 per year.**
- ▶ **Pro-Act treated lagoon water: 41,000 gallon of manure water will give you a total of 305 lbs. of nitrogen, 70 lbs. of phosphate, enough to meet the nutrient requirement for one acre of corn.**
- ▶ **Untreated lagoon water: 41,000 gallon of manure water will give you a total of 150 lbs. of nitrogen, 98 lbs. of phosphate, not enough nitrogen for corn but an over application of phosphorus.**

Minimum savings from Pro-Act treatment from nitrogen fertilizer per acre: (230-150) = 80 lbs. at 37 cents per lb. total \$29.60

Assumptions:

1. 50% of the organic N is available to the crops in the first year.
2. N fertilizer at 37 cents per pound (\$340/ton of urea @ 46% N fertilizer).
3. About 230 lbs. of nitrogen and 70 lbs. of phosphate are needed per acre to grow 180 bushels of corn.

Pro-Act treated lagoon top water:

41,000 gallons of manure water (about 1.5 acre-inch or 160,000 lbs) will give you a total of 305 lbs. of nitrogen, 70 lbs. of phosphate, enough to meet the nutrient requirement of corn.

For conventional lagoon water:

41,000 gallons of manure water will give you a total of 150 lbs. of nitrogen, 98 lbs. of phosphate. Not enough nitrogen for corn, but an over application of phosphorus.

¹Average derived from the following data:

	Total-N	Ammonium-N	Organic-N	Phosphate	Potash	Ammonium-N/ Total-N
Colorado State Extension	4	2.5	1.5	4	10	0.63
U. Missouri Extension	2.5	0.8	1.7	2.9	5.3	0.63
Ohio State Extension	4	2.5	1.5	4	5	0.63
OK State Extension	4.2	n/a	n/a	1	5	n/a
Oregon State Extension	5	4	1	1.1	5	0.80
Purdue Extension	4.2	2.3	1.9	1.7	3	0.55
NC State Extension	5	3.2	1.8	2.8	7.2	0.64
Average	4.1	2.6	1.5	2.5	5.8	0.66

*"We've cut our
electric bill
by \$700 a month."
Roy Beardslee
Lottahill Farms
Dairy*