TILL PLANT SYSTEM

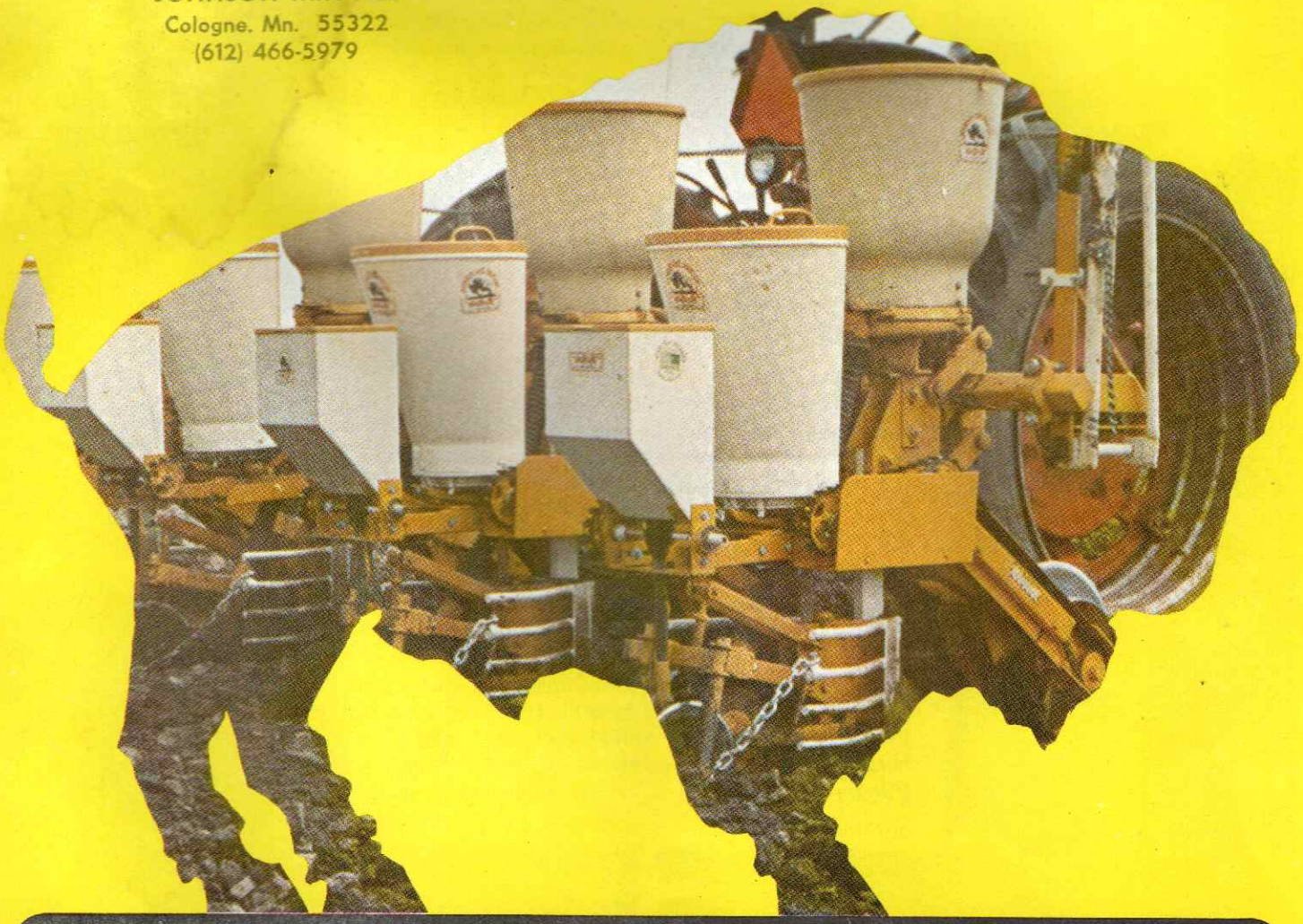
Buffalo®

Buffalo® ALL-FLEX TILL PLANTER

PAT. PEND.

...free floating units to plant any crop in any soil on any farm.

distributed by
JOHNSON MIN-TILL
Cologne. Mn. 55322
(612) 466-5979



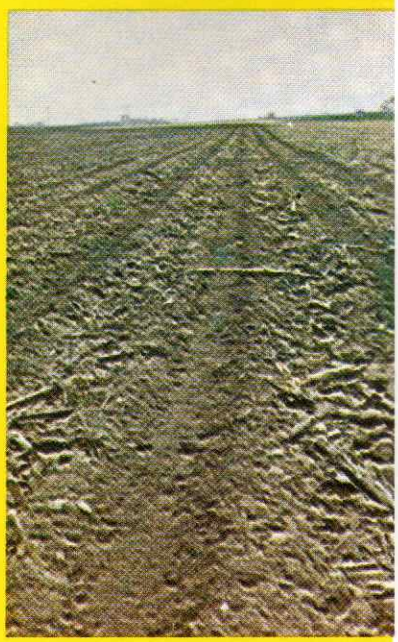
Buffalo®

Fleischer Mfg., Inc. Box 848, Columbus, Nebr. 68601 Phone 402—564-3244

ZERO-TILL · SLOT-TILL · NO-PLOW MINIMUM TILLAGE—RIDGE-ROW

...no matter what you call it, we've got the best in reduced or conservation planting.

It's the Buffalo ALL-FLEX PLANTER . . . the original planter that eliminates many field operations, makes plows and discs unnecessary, cuts labor costs, reduces wind and water erosion. It's part of a whole new way of farming we call the Buffalo Till Plant System.

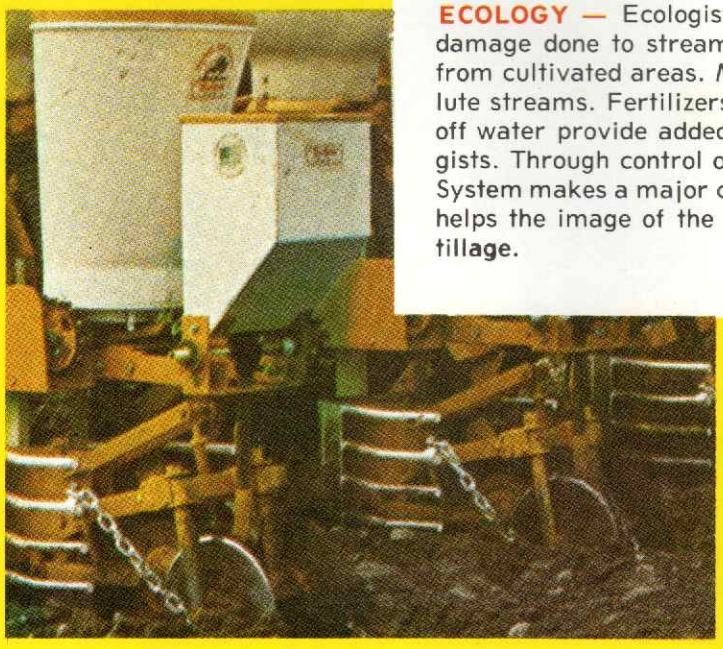


Economy ... Conservation ... Ecology ... these are the compelling reasons behind the Buffalo Till Plant System. They are the reasons why every major machinery manufacturer has or is planning to market a minimum tillage machine. Slot-Till, Zero-Till ... no matter what they call it ... all had their beginning in the original till plant system.

ECONOMY — Ten years ago, we made the claim that you could save up to $10 per acre with the till plant system, just by elimination of conventional plowing and disking. More important, you save valuable time when time is most important in early spring. The cost-price squeeze and the need to compress planting into a shorter time period have forced many to look favorably on the till plant system.

CONSERVATION — A shortage of moisture in many areas of the corn belt has made the Till Plant System popular in recent years. Surface residue increases soil intake of water, decreases run-off and evaporation. Thus the Till Plant System lets you make better use of available moisture.

ECOLOGY — Ecologists are dramatizing the damage done to streams and lakes by run-off from cultivated areas. Mud and silt run-off pollute streams. Fertilizers and herbicides in run-off water provide added ammunition for ecologists. Through control of run-off, the Till Plant System makes a major contribution to ecology—helps the image of the farmer in conservation tillage.



They're Catching On But They Haven't Caught Up.

Others are marketing minimum tillage equipment, but they can't offer the advantages of the Buffalo Till Plant System. In 15 years of testing and improving, Buffalo has developed the machine today that others will offer tomorrow.

How Is Buffalo Better?

From start to finish the Buffalo Till Planter is designed to do the best possible job of planting. Rolling Coulters slice open the furrow, cut through surface residues...depth-control band assures uniform seed placement. Sweep cuts level bed for patented furrow opener. Seed drops through tube into furrow and the unique one-inch zero-pressure tire presses it into moist ground. Then the disc hillers cover it lightly with loose dirt.

The result is seed uniformly placed, pressed into firm contact with the soil with a loose covering of soil. This means fast germination and quick starts in the spring even when moisture is below normal.

Plant Any Seed at Any Practical Rate

The Buffalo All-Flex Till Planter can be used to plant many crops. In addition to corn, soybeans and sorghum, the All-Flex has been used for sunflowers, sugar beets and dry beans. It can be used for many other seeds.

Planting rates can be set easily to plant from 6,000 to 50,000 seeds per acre. A system of seven different sprockets provides adjustment for desired rates. The operating speed can be anywhere from 3 to 6 miles per hour with 4-5 recommended for normal ground.

Minimum Upkeep And Maintenance

Buffalo is built to give you more time in the field. Simplicity of design means fewer moving parts to wear out. There are only 3 fittings to be greased on each row unit—you can grease the All-Flex in 5 minutes. All other moving parts are protected by sealed roller-bearings.

You save on adjustments, too. Insecticides and fertilizer applicators can be set to apply the same amount regardless of speed. Once you have them set, you can go 2 miles per hour or six miles per hour and the rate will remain the same.

Minimum Power Requirement

The Buffalo Till Plant system requires considerably less horsepower than many "Minimum Tillage" systems. There are no complicated PTO drives to cause breakdowns and increase upkeep. The Buffalo system does not move a lot of topsoil requiring additional power. Close-coupled tool bar mounting and shallow-draft operation combine to reduce h.p. requirement. If you can pull an 8-row planter, you can handle an 8-row Till Planter.

Will It Work On My Soil?

Thousands of farmers are now using the Buffalo Till Plant System...on sandy soils, heavy soils and all gradients between...on level, rolling and hilly land, with or without terracing.

They're saving time and money by eliminating several operations...they're getting bigger yields through better use of available moisture, earlier planting and better, more uniform stands.

Four Operations From Start To Finish

The Buffalo Till Plant System requires just four operations from start to finish, following corn. Three operations will do the job on any other ground. Fewer operations means lower costs and the most important thing you can do to raise profits is to cut costs. The Buffalo Till Plant System helps you reduce expenses, while saving time and getting bigger yields, too.

1. CUT STALKS. Shred stalks thoroughly in fall or spring, using a rolling stalk cutter or a rotary. It's important to do a good job of shredding stalks for the most efficient operation. Shredding also helps control insects, speeds decay and assimilation of stalks.

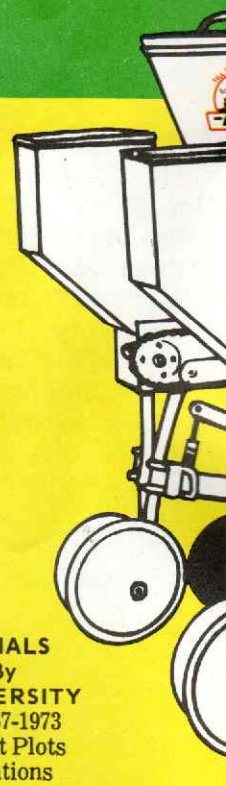
2. PLANT. With the Buffalo Till Planter, slice the top from the old ridge and plant. Weed seed is thrown into the row where weeds will be easy to control. Seeds are planted in higher, warmer ground for fast germination and quick start. Apply insecticide, fertilizer, herbicide all in one operation. Once over the field does it!

3. CULTIVATE. When corn is 12-16 inches tall, clean the weeds from the row, throw up ridge for next year with disc hillers. You'll be surprised at how few weeds there will be in the row. See literature on the Buffalo All Flex Cultivator.

4. HARVEST. No matter what method is used, there's no problem. In addition, the residue on the surface will hold down erosion and help prevent rough spots in the field.

BUILT FOR LONG LIFE AND DEPENDABLE SERVICE

1. **Positive Depth Control**—heavy duty disc cuts through sod or stalks to facilitate opening of soil. Depth control band maintains uniform depth.
2. **Sweep Opener**—cuts furrow 10 or 14 inches wide for planting, has 9 degree pitch for proper penetration.
3. **Trash Guards**—help clean row of surface residue, clods and corn roots to give clean 12-inch planting area.
4. **Patented Subsoiler**—designed exclusively for the Buffalo Till Planter. Cuts through soil to make a narrow furrow for ideal placement of seed.
5. **Plastic Seed Tube**—unexcelled for even, accurate placement of seed.
6. **Seed Press Wheel**—spring loaded, 1" x 10" wheel with zero-pressure tire firmly presses seed into moist soil for fast germination.
7. **Adjustable Discs**—designed to throw a light cover of clean loose soil over the seed.
8. **Roller Chain Drive**—for positive action. Assures long life and more trouble-free operation. Less adjusting.
9. **Big, Durable Seed Hoppers**—durable polyethylene hoppers with 1 bushel capacity.
10. **Fertilizer Attachment**—100 lb. capacity hoppers of high-impact polyethylene with disc openers.
11. **Insecticide Also Herbicide Attachment**—polyethylene boxes complete assembly for metering insecticide or herbicide. Feed cup assembly has all plastic parts for maximum corrosion resistance.



TILLAGE TRIALS
Sponsored By
PURDUE UNIVERSITY
6-Year Test: 1967-1973
Average of 4 Test Plots
in Indiana Locations

	Bu. per acre Average Yield
Conventional Spring Plow	117.2
Chisel-Plant	117.0
Buffalo Till Plant	122.5
No-Til Coulter	104.5

By: Carithers & Sons, 915 Lincoln or Rd 250 E, New Castle, Ind. 47362
For: Fleischer Manufacturing, Inc., Box 848, Industrial Site, Columbus, Nebraska 68601

First with the Idea and Still First in the Field!

The Till Plant System goes back to 1955 when individuals at the Nebraska Agricultural Engineering experimental farm near Lincoln initiated field trials. Many different machines and principles were tried and improved until the basic Nebraska Till Plant System evolved.

In 1959, Fleischer Mfg. Co. became interested in the Nebraska Till Plant System as a result of tests conducted in Platte County, Nebraska. The basic principle involved the conversion of existing makes and models of moldboard listers to the till plant principle.

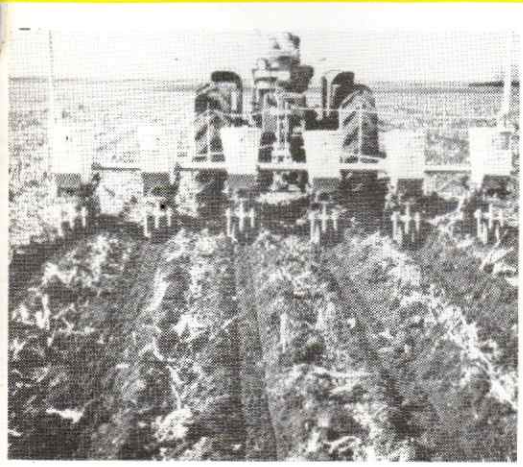
Working closely with University of Nebraska engineers, Fleischer then proceeded to develop the first Buffalo Till Planter in 1960. The basic till planter design has been constantly refined and improved over the years culminating in the introduction of the new All-Flex Till Planter.

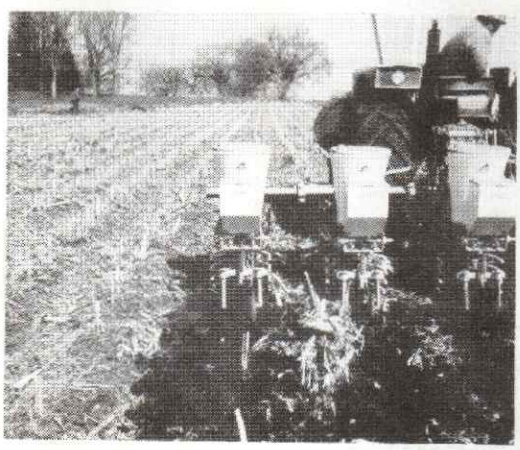
HERE'S WHAT PEOPLE ARE SAYING ABOUT THE BUFFALO TILL PLANT SYSTE

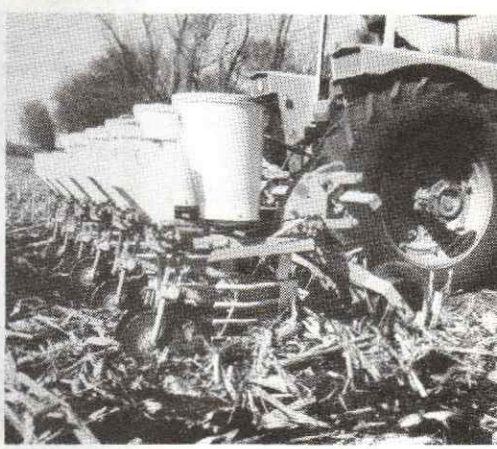
William Hintz, Monticello, Iowa
"My Buffalo Planter is the only m
chine on the farm that pays for
self each year on 400 acres of r
crops. It has cut down on tract
and man hours and I have had b
ter yields than when I plowed."

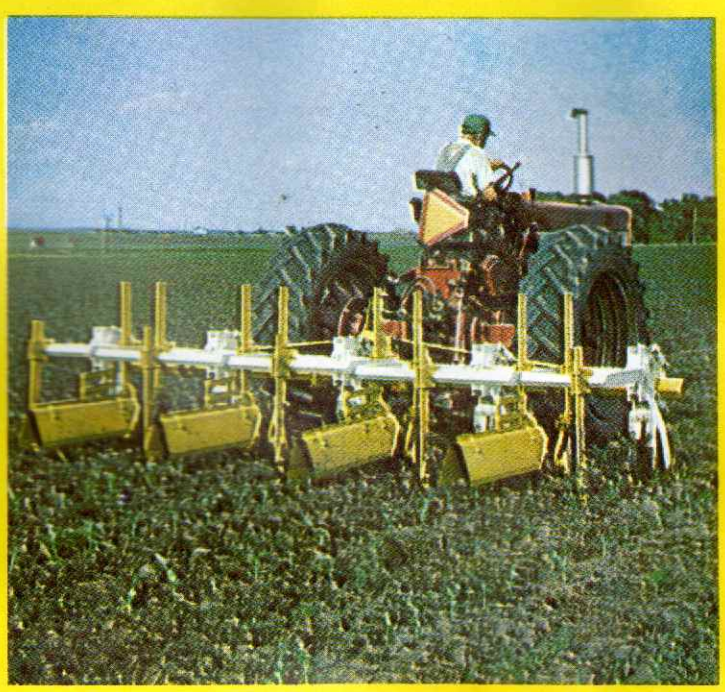
Larry Lust, Baxter, Iowa
"I planted my entire corn acrea
with the Buffalo Till Planter an
harvested more total bushels
corn than it ever had produced b
fore. My corn fields were the o
fields in the area that never rolle
even though it was very hot and d
in July."

Available in 2, 4, 6, 8 or 12 Rows.









Buffalo Slot Planter lets you plant directly into pasture sod, alfalfa, and small grain stubble

For many years crop scientists have been experimenting with direct planting in sod. The system offers many advantages under certain conditions.

1. It permits planting in established sod with minimum disturbance of the top soil. In light or sandy soils subject to blowing or where water erosion is a problem, seed can be planted and leave substantial sod areas to stabilize the soil.
2. It eliminates the need for plowing when rotating from grass or alfalfa to row crops. This saves substantial time and money inasmuch as plowing sod is a slow and demanding operation on men and machines.

In Nebraska's Sand Hills, slot planting has been used on soil which cannot be plowed without considerable erosion loss. Using herbicides to kill off remaining vegetation and a balanced fertilizer program under center-pivot sprinkler irrigation, researchers have obtained good yields while keeping erosion to a minimum.

The slot planter carves out a narrow row for seed placement by the usual methods. The remaining foliage between the row is sprayed with paraquat or similar herbicide. Then, by the time of cultivation, the space between the rows is ready to be cleaned out with a sweep and disc hillers can be used to build a ridge for next year's planting.

The Buffalo Slot Planter is used in small grain stubble planting such as double cropping. You can purchase the Buffalo Slot Planter as a complete unit or you can convert the Buffalo All-Flex Planter by purchasing the attachment only. The changeover to a slot planter from the 10" or 14" sweep is approximately twenty minutes per row.

Buffalo Perfected the Slot Opener

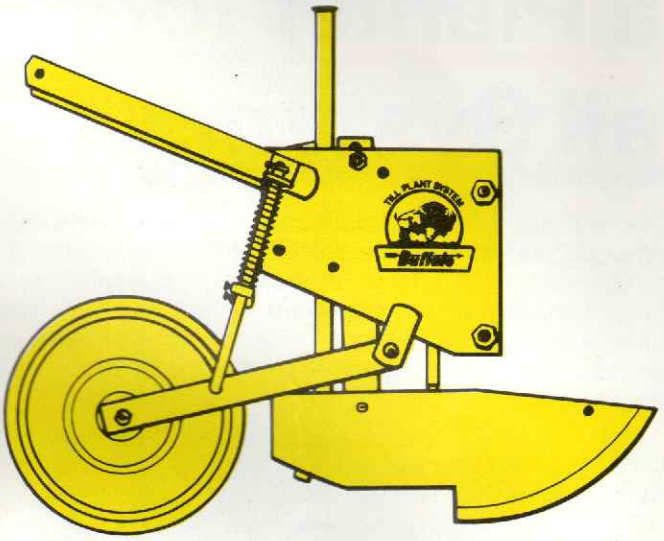
Fleischer Mfg. Co. was the first to recognize the value of planting in sod. Several years ago, they introduced the first practical slot opener as an attachment for the Buffalo Till Planter.

The Buffalo Slot Opener has been used in extensive field trials under all possible conditions. It has passed all tests with flying colors and is available as optional equipment on any All-Flex Till Planter.

Unexcelled Seed Placement and Planting Accuracy

The primary purpose of a planter is to get results... to plant seed in uniform pattern at uniform depth to avoid skips and misses. In test after test, Buffalo shows faster emergence and a better stand when compared with conventional planters. There are four primary reasons why the Buffalo All-Flex Till Planter gets results.

1. **Positive Drive to Hopper.** Flexing of unit keeps depth control drive wheel in contact with ground ...direct drive to hopper means regular even drop of seed.
2. **Plastic Seed Tube.** A special plastic tube eliminates "chatter" and scatter of seed. Even drop means uniform placement of seed.
3. **Exclusive Subsoiler.** Our own design. Runs directly behind the sweep to open an ideal furrow for the seed to drop. The shoe is also available with a tube for liquid fertilizer.
4. **Zero Pressure Press Wheel.** This unique 1" x 10" wheel with zero pressure tire presses the seed into the soil. The seed makes positive contact with the soil for quick germination and rapid start. Flexing of the zero pressure tire retards sticking and lets you plant under moist conditions without difficulty from "balling."



Covering Discs Regulate Depth

Adjusting covering discs allow you to throw as much dirt on the seed as you wish. Covering soil is loose and porous to allow seedling to come through with minimum difficulty. Since crop residues are left on the surface, you'll have little or no trouble with crusting over under most soil conditions. Adjustment of the discs is a simple matter in the field.

The Buffalo Till Planter... a Planter for all Systems

The Buffalo All-Flex Planter is perhaps the most versatile planter ever developed. With a minimum of adjustment, it can be a conventional planter lister, surface planter or furrow opener. Plant any way you wish...you'll get outstanding results...the same ease of operation and the same accurate seed drop and placement.

Other planters can't do what the Buffalo does, but we can do what they can do.

Ridge Planting—Zero Tillage—Slot-Till
Plow-Plant—No-Plow—Conservation Tillage

And, of course, Buffalo is the original minimum tillage system. No matter what you call it—we have the machine to do the job. We have the first and we have the best method of reducing tillage operations to save time and labor, while reducing erosion from wind and water.

Literature available on Buffalo All-Flex Cultivator.

Major savings in horsepower-hours per acre when the Till Plant System is used in comparison with the conventional tillage, planting and harvesting systems:

Here are the figures:

Operation	Conventional	List	Till Plant	Slot Plant
Chop stalks	9.0	9.0	9.0	
Disk	6.6	6.6		
Plow	19.1			
Disk	6.6			
Harrow	5.5			
Plant	4.0	7.3	3.7	2.0
Spray	1.0		1.0	1.0
Cultivate	3.3	3.3	4.4	
Cultivate	3.3	3.3	4.4	
Combine	8.2	8.2	8.2	8.2
TOTALS	66.6	37.7	30.7	11.2
Fuel equivalents (12.5 hp-hr-gal diesel fuel)	5.33	3.02	2.46	0.90

Buffalo Till Plant Systems
Fleischer Mfg. Inc.
Box 848, Columbus, Nebr. 68601