



SPECIAL REPORT

BENEFITS OF MULTI-SPECIES GRAZING

Mixed species grazing has several advantages. Cattle prefer grass over other types of plants, and are less selective than sheep or goats. Sheep and goats, on the other hand, are much more likely to eat weeds. Sheep prefer forbs (broad leaved plants) to grass, and goats have a preference for browsing on brush and shrubs, and then broad-leaved weeds. Therefore, grazing cattle, sheep, and goats together on a diverse pasture should result in all types of plants being eaten, thus controlling weeds and brush, while yielding more pounds of gain per acre compared to single-species grazing.

The addition of goats to cattle pastures has been shown to benefit the cattle by reducing browse plants and broad-leaved weeds. This permits more grass growth. Goats will control blackberry brambles, multiflora rose, honeysuckle, and many other troublesome plants. It is thought that you can add one goat per cow to a pasture without any

reduction in cattle performance, and with time the weedy species will be controlled so that total carrying capacity is improved. This is a cheap way of renovating pastures, and you can sell the extra goats and kids for a profit, as well. The same principle holds for sheep. Although they are less likely to clean up woody plants, sheep are quite effective at controlling other weeds, with proper stocking pressure.

Multi-species grazing may also benefit pastures that are less diverse, by encouraging more even grazing. Cattle will tend to graze taller grasses that sheep may reject. It has been shown that sheep graze near cattle manure deposits, which cattle avoid. This also results in more even use of the pasture. Carrying capacity and pasture productivity are improved, and animal gains are also increased. Diversification of species results in diversification of income sources. Also, some researchers have found that adding cattle to a sheep flock may help reduce predation losses, after a period of bonding.

Another way that multi-species grazing can improve pasture and animal production is through the consumption of poisonous plants by a species that is not harmed by the toxins. For example, leafy spurge and larkspur, serious problems in the western U.S., are harmful to cattle but not sheep. Therefore, using sheep to eliminate those plants will result in more useable and safe pasture for cattle. Conversely, some plants are problematic for sheep, but easily tolerated by cattle.

Parasites are a major concern with sheep and goats, under any system. Worm eggs are deposited on the pasture in the manure; the eggs hatch and larvae are consumed by grazing animals. If left untreated, concentrations of parasites will increase with time as this cycle is repeated. Higher concentrations of animals on a pasture may tend to magnify the infestation. Parasites are species-specific; that is, cattle parasites affect cattle, and not sheep, while sheep parasites affect sheep but not cattle. The cattle act as "vacuum cleaners," ingesting the sheep worm larvae, and preventing them from affecting the sheep. This is most helpful when sheep and cattle follow each other in a grazing system. However, goats and sheep do share parasites, and therefore grazing them together does not improve parasite control.

Because parasite eggs are deposited in the manure, and larvae only travel a short distance up grass blades, animals grazing taller forages will not consume worm eggs or larvae. Therefore, goats that are given ample browse will be much less likely to become infested with parasites. If goats are forced to graze at ground level, however, the goats may acquire a serious parasite load.

Potential Problems with Multi-Species Grazing

Problems may arise with mixed species grazing. One of these is the potential for "bully" animals. Bully animals can be from any species. At lambing time, some cattle may be difficult and bothersome to the sheep, or the shepherd.

Another problem is supplemental feeding, including the feeding of trace minerals. The mineral supplement that is adequate for sheep may not be so for cattle, and a mineral supplement that is best for cattle may be toxic to sheep, as sheep do not tolerate much copper. This difficulty, and the one of aggressive animals, may be overcome by simply rotating the animals. If sheep are grazed for a few days, then moved to a fresh pasture and the next species put on the first pasture, you may get the

benefits to your pasture and avoid these problems.

Fencing is another issue to consider. Electric fencing is generally considered to be the most economical and convenient. Opinions vary as to number of strands needed. If sheep get in the habit of going through the fence, it's very hard to cure them. Goats are notoriously hard to contain in an area.

If cattle fence is already in place, one idea is to string off-set wires inside the fence. This should be set in about 8 inches, and be 12-14 inches above the ground, and must be maintained at 4,500 volts or better to be effective. Also, it is a good idea to train sheep or goats to electric fence. This is done by confining them in a small area with a very powerful fence, or by placing feed on the other side of the fence, just out of reach. For best results, the training area should be surrounded by secure fencing such as panels, woven wire, or a board fence. This practice will discourage those individuals inclined to lunge forward or run through the fence after being shocked.

—ATTRA Website (Appropriate Technology For Rural Areas)

We Salute Our Farming Industry

Do It With A DISC PRO

WHY SPEND THOUSANDS for mower conditioners that push the cutterbar into obstacles at impact?

Vermeer DiscPro Mower Conditioners feature the exclusive DynaGuard® Suspension System which lifts and floats over damaging obstacles and helps reduce stress and costly repairs.



Vermeer DiscPro Mower Conditioners Center-pivot (CP) and side-pull (SP) models 1030 DiscPro (CP) — 13' cutting widths #40 DiscPro (SP) — 10' 6" cutting widths

WHY PAY EXTRA FOR TOPPING SHOES to make your cutting height adjustments?

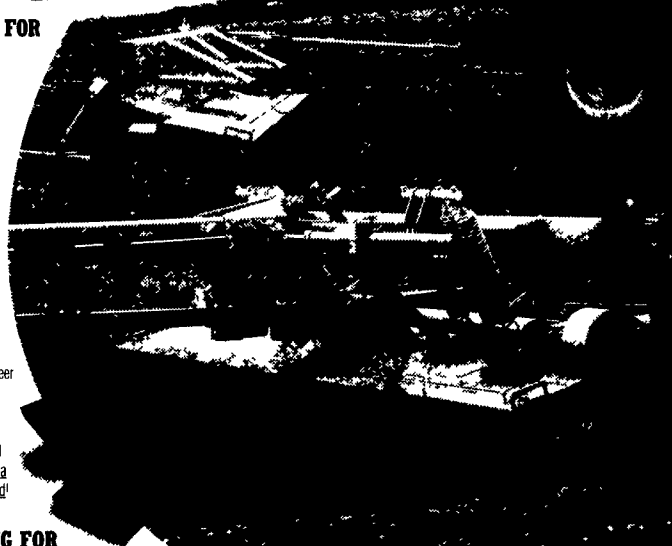
With Vermeer DiscPro Mower Conditioners you can change cutting heights in seconds without spending a dime!

WHY SETTLE FOR CHEAP CUTTING KNIVES that wear faster, shatter more easily and waste time?

Cutting knives used on Vermeer DiscPro Mower Conditioners are 25% thicker austempered heat treated for shatter resistance reversible and you don't have to change out a set every time you turn around!

TIRED OF PAYING FOR CONDITIONER ROLLERS that wear out, cost money and lose their edge?

With the Vermeer DiscPro Mower Conditioners you have steel rollers that are easy to adjust, extremely versatile for all types of crop conditions and they're long lasting!



©2003 Vermeer Manufacturing Co. All rights reserved. VERMEER is a registered trademark of Vermeer Manufacturing Company in the U.S. and other countries.

Vermeer Manufacturing Company Pella, Iowa 50219 • 800-370-3659

www.vermeerag.com

SEE YOUR LOCAL VERMEER DEALER

Now available at:

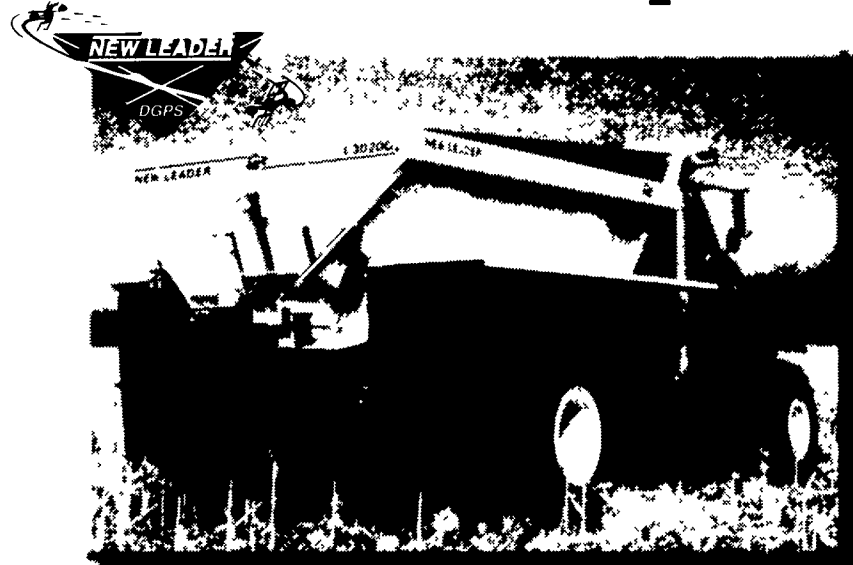
Bob Wilkins
Saxton, PA
814-635-3392

Triple H Equipment, Inc.
Peach Bottom, PA
717-548-3775 / 800-675-2019

Glenn Beidler
Freeburg, PA
670-539-8993

NEW LEADER

G4 SERIES Fertilizer and Lime Spreaders



The New Leader G4 Series Spreader can spread more acres per day-- with a wider range of material application rates--than any other granular applicator currently on the market. The new L3020G4 variable rate broadcaster allows you to

- ▶ Spread lime with effective swath widths up to 60'.
- ▶ Spread fertilizer with effective swath widths up to 90'.

The New Leader L2020G4 is also available.

For more information contact:
ANNVILLE EQUIPMENT CO.

470 Palmyra-Bellegrove Road Anville, PA 17003
717/867-4631 or 800/233-0520

Email: aecl@paonline.com
website: annvilleequipmentcompany.com

