

# Using 4 million unused acres for pasture

UNIVERSITY PARK — Animal scientists, agronomists, agricultural engineers and foresters in the College of Agriculture at Penn State are studying the potential for using Pennsylvania's four million acres of unused land as pasture for beef cattle and sheep.

Such marginal land commonly consists of abandoned cropland, unused for 10 years or more, and stands of young pines or open, sparsely populated hardwood stands. These lands present an untapped forage resource for the state's beef cattle and sheep, according to animal scientists L.L. Wilson and H.W. Harpster.

One approach in assessing this potential has been to study the nutritive value of the native or "wild" vegetation already present. Surprisingly, many weeds are palatable for sheep and cattle if the plants are grazed while young. Calcium phosphorus, magnesium and copper levels are highly desirable in these weeds and can

supplement the low levels of many conventional grasses and legumes.

The potential productivity of marginal lands, in terms of animal carrying capacity, is very important to farmers. In studies led by Dr. Wilson, three to five acres of old abandoned farmland were required to meet the nutritional needs of one beef cow and her calf during the grazing season. For a growing steer, two and one-half acres were needed. Sparsely wooded pine or hardwood stands would require 10 to 20 acres to support each cow and calf.

How marginal lands are managed is also vitally important. They should be sparsely grazed, or rotationally grazed, since these pastures are extremely fragile, and overgrazing can cause erosion. Thus, such hill pastures need a 30 to 40 day rest at least once, or perhaps two or three times, during the grazing season. This can be accomplished by rotational grazing, Dr. Wilson

pointed out.

Wilson and Harpster cautioned that most hill land pasture is poorly drained, thus subject to trampling by livestock which destroys the surface for future growth of grass. Use such lands only when the ground is dry enough to avoid muddiness. Mud will lead to trampling of grass cover. Trees may be helpful in reducing erosion and holding soil. However, in most cases it is still best to fence cattle out of woodlands, and manage the hill land pasture so as not to damage trees.

"Location of hill pastures is also important," Wilson commented. "Southern slopes many times will have grass ready for grazing two to three weeks earlier than northern slopes. Southern slopes also tend to dry out quicker in the spring, allowing fertilizer application and increased growth earlier in the spring," he added.

In addition to studying the productivity of marginal lands in their natural state, the researchers also looked at improving forage availability through more intensive management. Four pasture establishment/management systems studied included:

1. Surface seeded with recommended legumes and grasses, no lime or fertilizer applied, 30 percent brush cover, grazed with sheep and goats.

2. Same as 1 but grazed with sheep only.

3. Surface seeded with one-half recommended amounts of lime and fertilizer, rotationally grazed by sheep.

4. Same as 3 with full recommended amounts of lime and fertilizer.

The value of intensive

management was clearly seen in terms of the pounds of lamb produced per acre, according to Dr. Harpster, sheep project leader. System 1 produced 76 pounds; system 2, 95 pounds; system 3, 197 pounds; and system 4, 333 pounds of lamb per acre. The growth of kid goats was an added benefit on system 1.

"These results were averaged over three grazing seasons and thus reflect normal variations in rainfall from year to year," Dr. Harpster stated.

The increased lamb production on systems 3 and 4 were a direct result of increased forage growth

through fertilization and improved forage use through rotational grazing. Both practices are important in obtaining an economical return from marginal land, Harpster affirmed.

The impact of the goats co-grazing with the sheep in system 1 also suggests a useful management tool. While sheep preferred the more conventional grasses and legumes, goats clearly preferred brushland. After two to three years of grazing, much of the brush disappeared, allowing sunlight penetration and emergence of seeded grass species.

## First aid for spots and stains

DELAWARE COUNTY — It always seems to be just when cleaning supplies are low that spills and stains occur, says Maryetta Dorricott, Delaware County cooperative extension service home economist. Most people try to keep their medicine chest equipped with emergency supplies and food shelves stocked for the unexpected. However, not many well-prepared to treat spills and stains on favorite clothes. Prompt action can mean the difference between wearing clothes again or sending them to the discard pile.

Most stains on washable fabrics can be removed with items normally on hand such as white absorbent fabric, all-purpose detergent and soap, baking powder, cornstarch and deodorant bath soap.

More specific cleaning materials such as drycleaning fluid containing perchloroethylene or trichloroethane, enzyme pre-soak,

non-oily fingernail polish remover, clear household ammonia and household cleaner, are found in most homes as are common laundry products like chlorine bleach, oxygen bleach, and prewash soil-and-stain remover.

However, few people think to include color remover, rust remover, paint solvent, banana oil and sodium thiosulfate in their regular stock of cleaning supplies. If all or most of these cleaning items are not on your laundry shelf, you may want to add them to your next shopping list.

This checklist and other useful information is yours for the asking in a new publication now available from your Delaware County Cooperative Extension Service. Call 565-9070 and ask for a copy of Removing Stains and Odors from Washable Fabrics. Penn State is an affirmative action, equal opportunity university.

## Organize job search before taking to the road

UNIVERSITY PARK — Don't waste your time or that of a potential employer until you have your act together.

Whether you are entering the marketplace for the first time or trying to re-enter, you must know how to market your skills and abilities.

Designed to help you develop basic skills useful in finding a job is a correspondence course available from The Pennsylvania State University. Titled, "Job Hunting Skills," the course presents some basic principles and techniques for organizing your own job hunting campaign.

Sixteen traits sought by employers are listed and discussed. Some of the other topics discussed are: knowing yourself, learning about an occupation, how to find employers who are hiring people like you, what an employer can legally ask you, writing applications, personal resumes and job letters, the job interview, and getting along on your new job.

You can get a copy of the seven-lesson course by send \$6.75, including handling, to JOB HUNTING SKILLS, Dept. 5000, University Park, PA 16802. Make check payable to PENN STATE.

## Home maintenance file saves time, trouble

YORK — If you can't remember who fixed your furnace the last time it broke down or how much it cost to replace your kitchen fan blades, you may have some problems the next time you need to take care of either again.

A home maintenance file can help you keep track of all work done and purchases made, what each cost, and the store or service center you went to for each item or repair.

A home maintenance file also can help you figure out how much to budget for maintenance or replacement in the future. Although prices for both tend to go

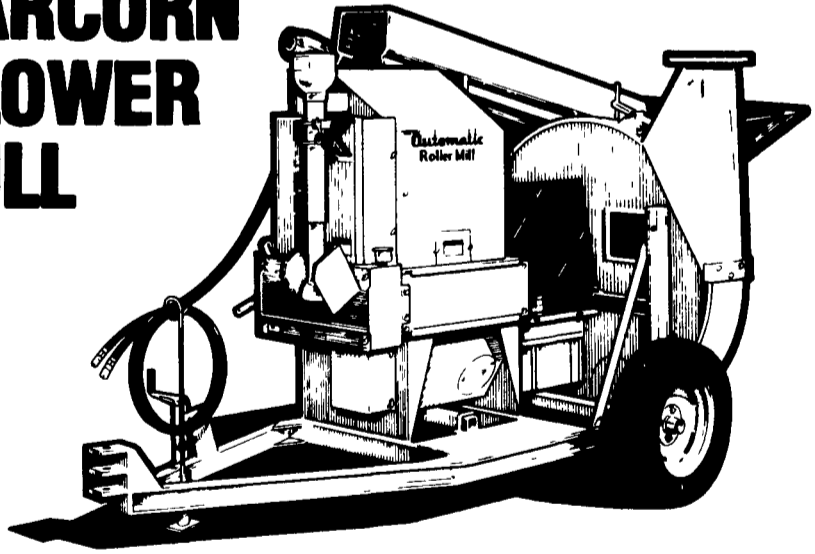
up, you'll at least know how much it cost last time and you can get some idea of what to expect.

And the file can help you remember which service people to call — or not to call — the next time something needs to be fixed.

You can also use the file to store warranty and "use and care" information. It is a good way to keep track of the model number or serial number of certain parts that need to be replaced often. Be sure to file the exact name and type of paint you've used so you can be sure to get the same one if you have to repaint a wall or trim.

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