

SnapPlus

Wisconsin's Nutrient Management Software

Conservation
Standards

Nutrient Management on Pastures (ARM Pub 244, 03/14)

ATCP 50 implements soil and water conservation standards adopted by the Department of Natural Resources (DNR), which includes the requirement that pastures comply with the soil loss and Phosphorus Index (PI) standards. This document explains the conditions under which ATCP 50 pasture requirements apply and the flexibility allowed in ATCP 50 when developing a nutrient management (NM) plan for pastures to demonstrate compliance with the soil loss and PI standards. Farmers may continue to claim Farmland Preservation tax credits while planning pastures with a performance schedule developed by the county land conservation department.

SnapPlus (v2 or later) can be used to determine soil loss and PI values under a number of pasture and dry lot management scenarios. If a pasture is included in a NM plan developed using SnapPlus that meets the PI limits in NR 151.04, the plan can be used to demonstrate compliance with DNR's standards.

Wisconsin Department of Agriculture, Trade and Consumer Protection, Land and Water Resources Bureau <http://datcp.wi.gov/ATCP50>



WHEN MUST A PASTURE BE INCLUDED IN A NM PLAN? *Italicized words are defined on the following page.*

INCLUDE A PASTURE IF ANY APPLIES:

- ✓ It receives mechanical applications of nutrients. Develop a NM plan for this **pasture** using soil samples collected at the frequency of 1 sample per 5 acres every four years and analyzed by a DATCP certified soil testing laboratory [ATCP 50.04(3)].
- ✓ It is stocked at an average of MORE than 1 **animal unit** (AU) per acre*. Develop a NM for this pasture either using soil tests according to ATCP 50.04(3) or 'assumed soil test values' of 150 ppm P and 6% OM.
- ✓ It has a herd present in the winter and is not a **feedlot**. Develop a NM for this pasture either using soil tests according to ATCP 50.04(3) or 'assumed soil test values' of 150 ppm P and 6% OM.

DO NOT INCLUDE A PASTURE IF EITHER APPLIES:

- ✓ It is a **feedlot**, **OR**
 - ✓ It is stocked at an average rate of 1 AU per acre or LESS* at all times during the **grazing season**,
- AND**
- ✓ It does not received mechanical nutrient applications.

* Flip the page to see how to calculate the average stocking rate of your pastures and an example scenario!

HOW TO CALCULATE THE GRAZING SEASON'S AVERAGE STOCKING RATE OF YOUR PASTURE (AU/ACRE)

There are two methods available to calculate a pasture's average stocking rate. The first method is to use the **Grazing Application Estimator** in SnapPlus (available for free at <http://snapplus.wisc.edu/>). The second method is to calculate it manually using the equation below along with the DNR's publication for calculating animal units, Form 3400-025A (http://dnr.wi.gov/topic/agbusiness/documents/3400025a_wt.pdf).

$$\left[\frac{(\text{Animal Units in herd} \times \text{Days pastured} \times \text{Percent of day grazed})}{\text{Acres of pasture}} \right] \div 244 \text{ grazing season days} = \text{AVERAGE STOCKING RATE during the grazing season (AU/acre)}$$

Represents the average grazing season from April through November

Example scenario

Does this pasture need to be included in a NM plan?

A 15 dry cow herd grazes on a 5 acre pasture for 100 days during the summer. The herd spends 50% of the day on the pasture.

$$15 \text{ current number in herd} \times 1.43 \text{ equiv. factor} = 21 \text{ AU}$$

$$21 \text{ AU in herd} \times 100 \text{ days pastured} \times .50 \text{ (50\% of day)} = 1050 \text{ AU/day}$$

$$1050 \text{ AU/day} \div 5 \text{ acre pasture} = 210 \text{ AU/day/acre}$$

$$210 \text{ AU/day/acre} \div 244 \text{ days} = 0.9 \text{ AU/acre}$$

The average stocking rate for this pasture is LESS than 1 AU/acre; it **does not need to be included** in the NM Plan.

DEFINITIONS

Animal unit [NR 243.03 (5)]: a unit of measure used to determine the total number of single animal types or combination of animal types, as specified in s. NR 243.11, that are at an animal feeding operation.

Feedlot [NR 151.015 (8)]: a barnyard, exercise area, or other outdoor area where livestock are concentrated for feeding or other purposes and self-sustaining vegetative cover is not maintained. "Feedlot" does not include a winter grazing area or a bare soil area such as a cattle lane or a supplemental feeding area located within a pasture, provided that the bare soil area is not a significant source of pollution to waters of the state.

Grazing Season [ATCP 50.04 (3) b. Note]: Includes the months of the year when pasture vegetation is actively growing.

Pasture [NR 151.015 (15m)]: Land on which livestock graze or otherwise seek feed in a manner that maintains the vegetative cover over the grazing area. Pasture may include limited areas of bare soil such as cattle lanes and supplemental feeding areas provided the bare soil areas are not significant sources of pollution to waters of the state.

Note that grazed woodlands are considered feedlots.

