University of Maryland Extension: Efforts Towards Regenerative Agriculture

Presented by Amanda Grev, PhD

Forage Specialist, University of Maryland Extension

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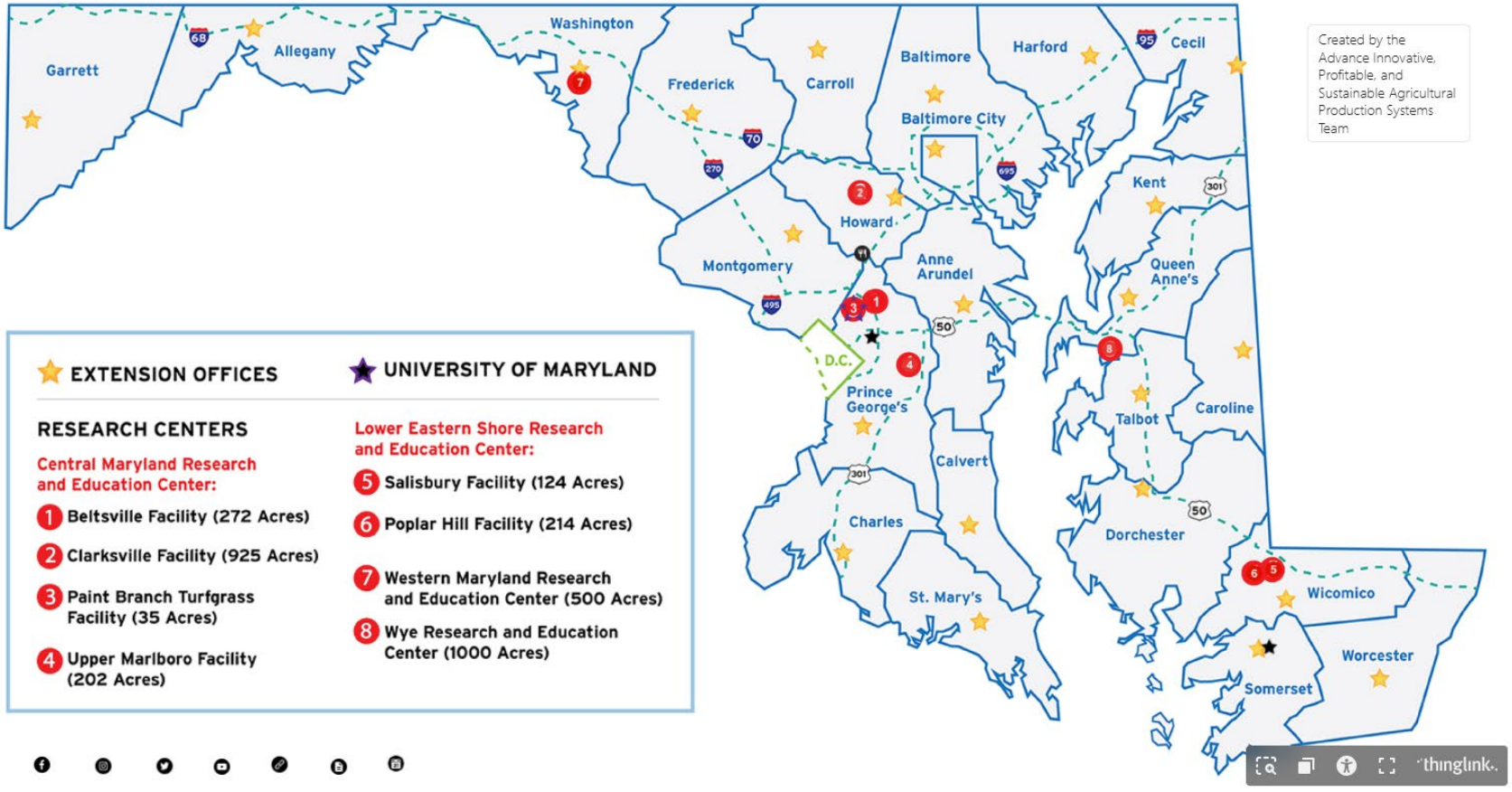
UME Team Members

Specialists – agronomy, forages, livestock, poultry, entomology, horticulture

County-based agricultural educators in most Maryland counties

Nutrient management specialists and plan writers



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UME Major Program Areas

Animal Science

Farm and Agribusiness Management

Fruit & Vegetable Production

Integrated Programs

Agricultural Nutrient Management Program

Ornamental Horticulture

Row Crop & Forage Production

Urban Agriculture

Pesticide Safety and Training

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Winter Meetings/Conferences

- Agronomy, forage, horticulture, fruit and vegetable, precision agriculture, urban farming, ag law

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Summer Field Days/Tours

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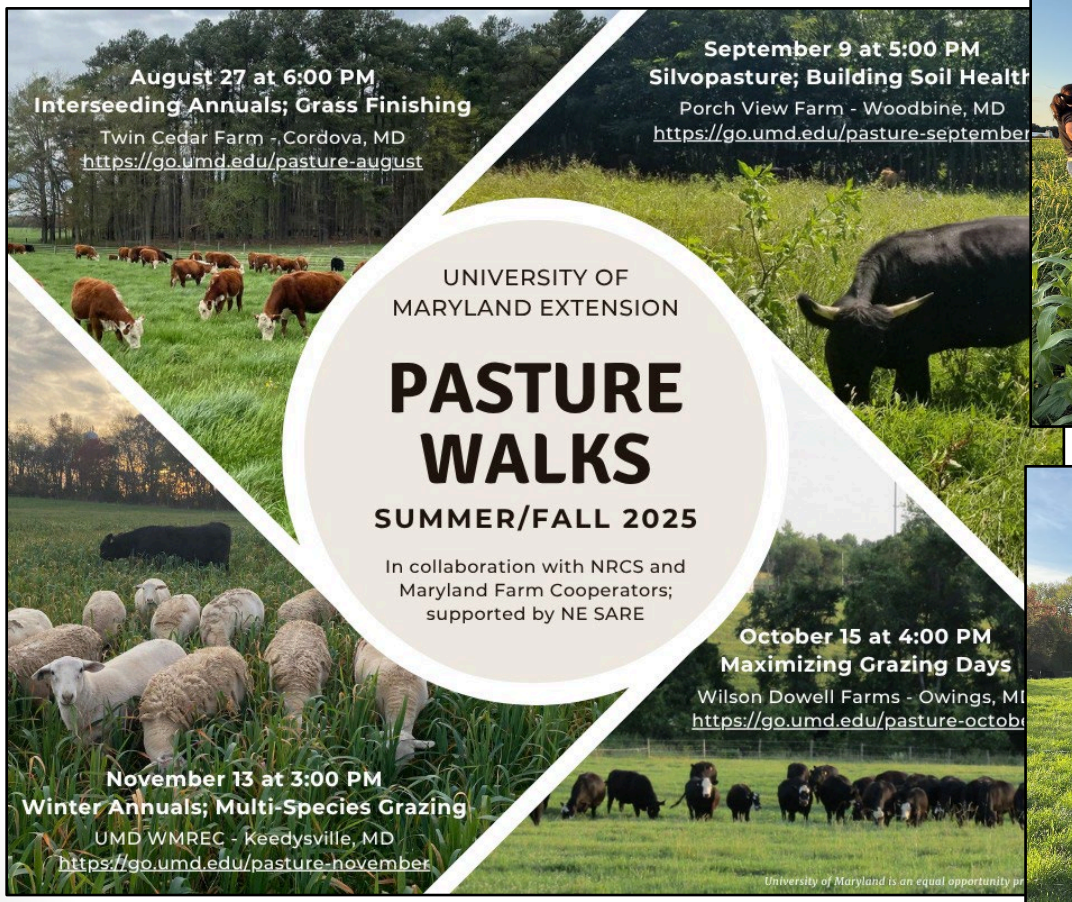
Pasture Walks



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Hands-On Courses/Workshops

Maryland Beef Producers Series III – Pasture Development and Management

Cost: $35 (Includes all refreshments, lunch and educational materials)

This course has been approved for 4 Nutrient Management and 4 Pesticide Applicator Recertification Credits

For more information about this one-day workshop, please visit our website:
https://ansc.umd.edu/extension/beef-extension/series-iii

	Date	Time	Location
Western Maryland	Friday, April 3, 2020	8:45am-3:30pm	Washington County Ext Office 7303 Sharpsburg Pike Boonsboro, MD 21713
Southern Maryland	Friday, April 17, 2020	8:45am-3:30pm	St. Mary's County Ext Office 26737 Radio Station Way Leonardtown, MD 20650
Eastern Shore	Friday, May 1, 2020	8:45am-3:30pm	Wye Angus 2016 Carmichael Rd Queenstown, MD 21658
Northern Maryland	Friday, May 15, 2020	8:45am-3:30pm	Harford County Ext Office 3525 Conowingo Rd Street, MD 21154

To Register Online: https://umdbeef-series3.Eventbrite.com

Topics Covered:

- **Soil Fertility and Collecting Soil Samples**
- **Setting up a Pasture System on your Farm**
- **Common Forages and Pasture Assessment**
- **Weed Identification and Management**
- **Extending the Grazing Season – Cover Crops**
- **Matching Forages with Cattle Nutrition**
- **Cost-Sharing Programs**

Registration limited to first 30 participants

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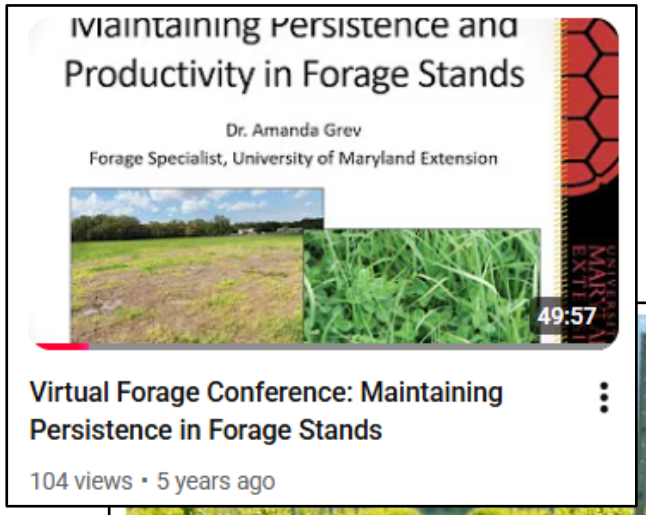
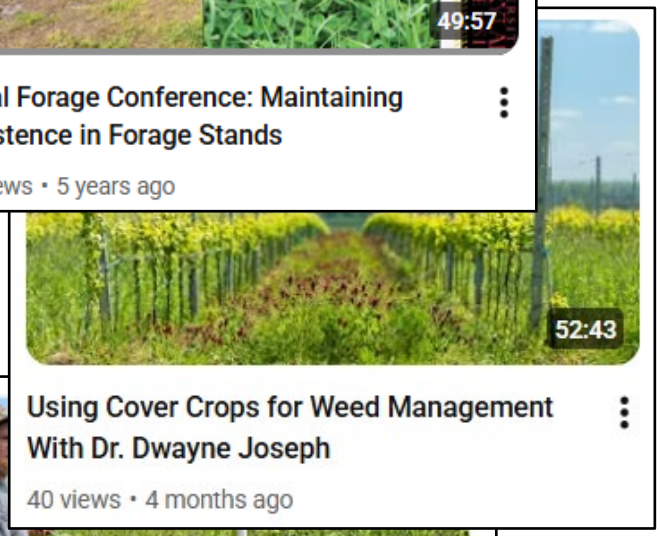
Online Education-Webinars





Online Education-Factsheets

WHAT ARE YOU INTERESTED IN?

- 4-H & Youth Resources
- Agribusiness Management
- Animal Agriculture
- Environment & Energy
- Food & Nutrition
- Natural Resources
- Plant Agriculture

If there is a need for something specific, we want to know!

Educational Resources

Here you will find educational resources on a variety of forage-related topics, including grazing management, hay production, pasture renovation, and soil health and fertility.

Articles/Publications

Research Updates

Videos

https://go.umd.edu/forageresources

https://extension.umd.edu/resources/

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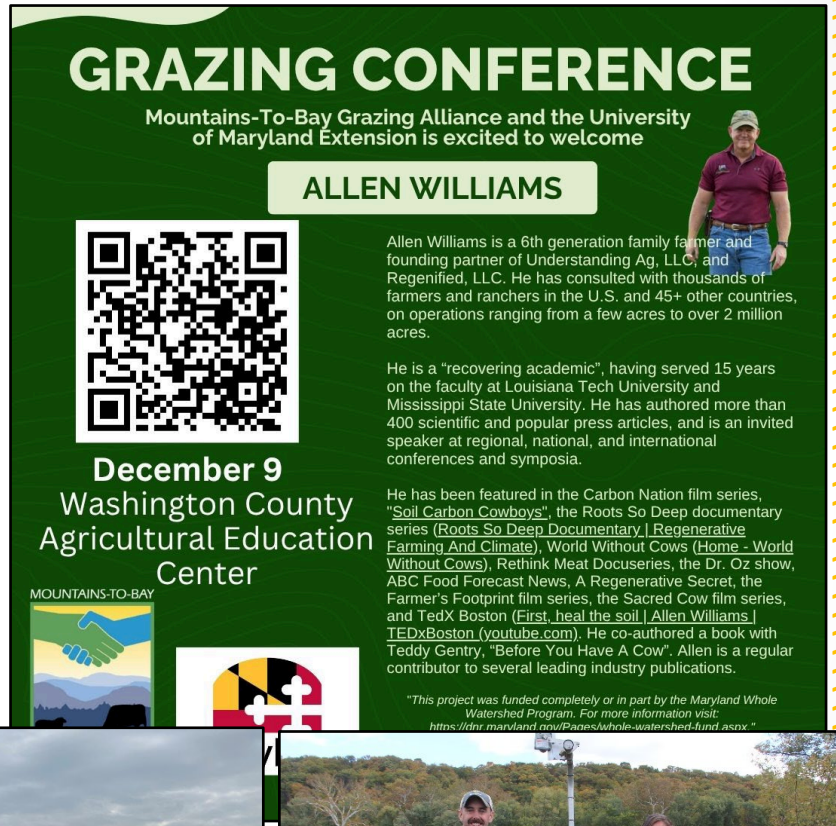
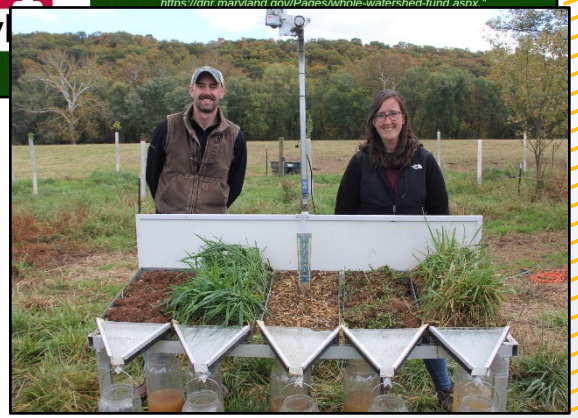
Educational Partnerships





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UME Internship Program

The mission of the Extension internship program is to build a skilled agricultural workforce capable of solving our most pressing agricultural and societal challenges. Interns are prepared to contribute directly to key areas: environmental stewardship, equitable market access, economic resilience, food and nutrition security, and sustainable production for a thriving future.

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COLLEGE OF AGRICULTURE & NATURAL RESOURCES

USDA

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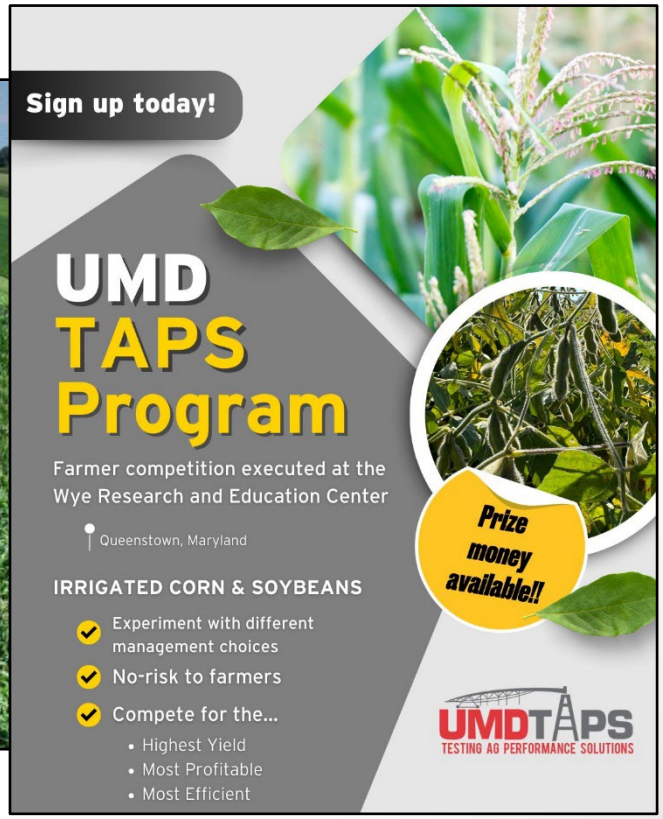
https://extension.umd.edu/resource/workforce-development-extension-internships/

Testing Ag Performance Solutions

- Project takes farmer and industry professionals' craziest whims and tests them in one field, side by side, to help refine crop management strategies



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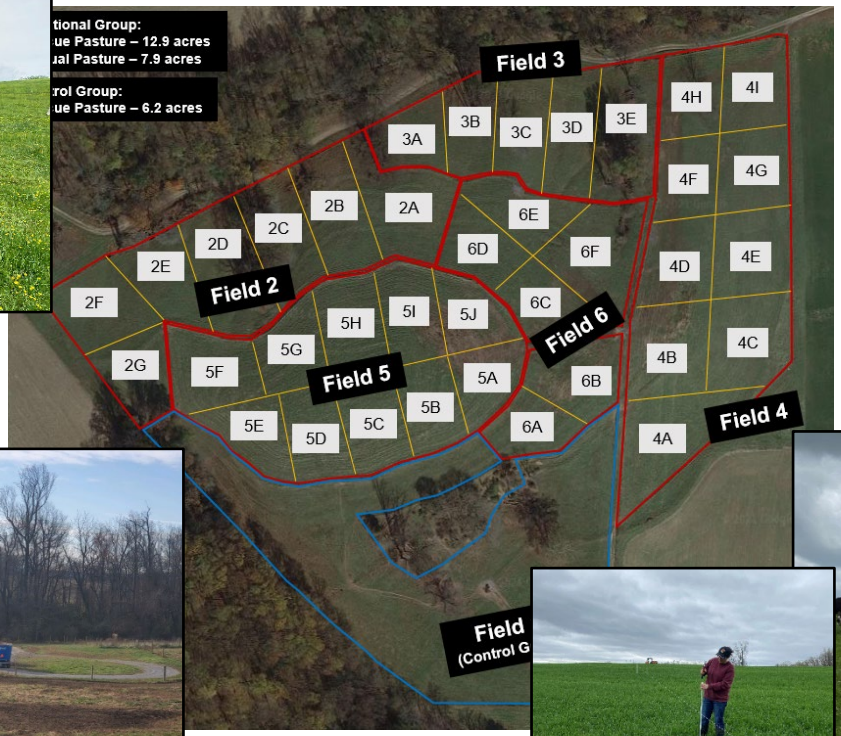
Dairy Heifer Grazing Study

- Objective: determine effects of improved pasture management on dairy heifer performance and economics relative to conventional system

Continuous pasture
+ daily TMR



Rotational grazing
+ mineral mix
Area for annuals
Frost seed clover

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Triticale Fertility/Feeding Study

- Investigate the effect of nitrogen fertility rates with and without sulfur on triticale forage to determine effects on triticale yield, forage quality, soil nitrates

Fertility Treatments

CON: 0 N, 0 S
SUL: 0 N, 15 S
NLOW: 50 N, 0 S
NSLOW: 50 N, 15 S
NMED: 100 N, 0 S
NSMED: 100 N, 15 S
NHIGH: 150 N, 0 S
NSHIGH: 150 N, 15 S

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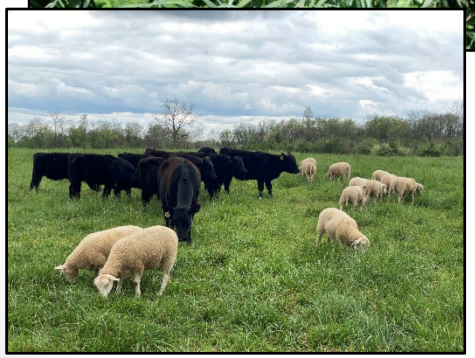
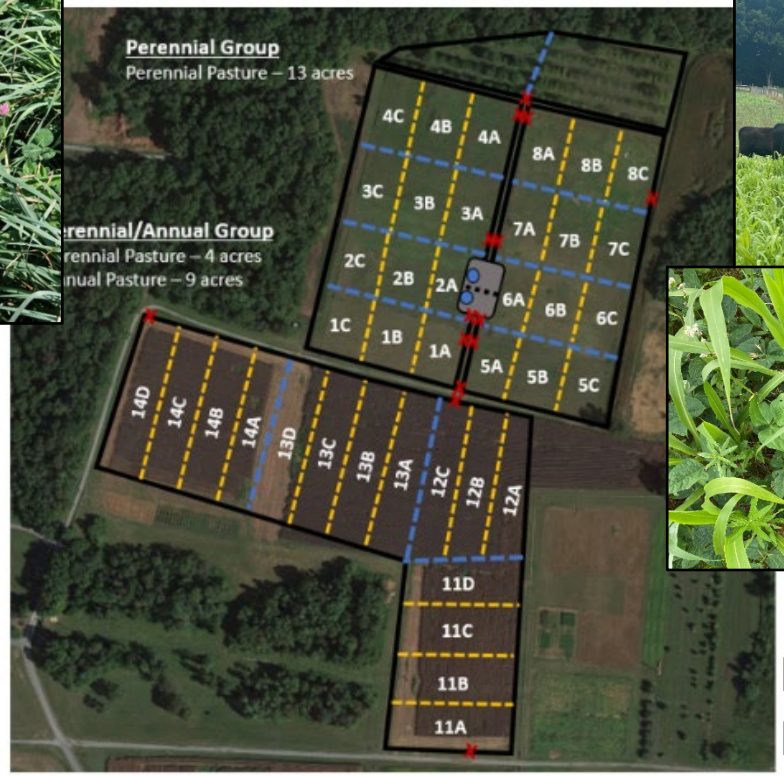
Perennial/Annual Grazing Study

- Objective: to compare forage production, quality, livestock performance, soil health, and economics between perennial vs. combination forage system



Rotational grazing perennial pasture



Rotational grazing perennial and annual pastures (winter/ summer rotation)

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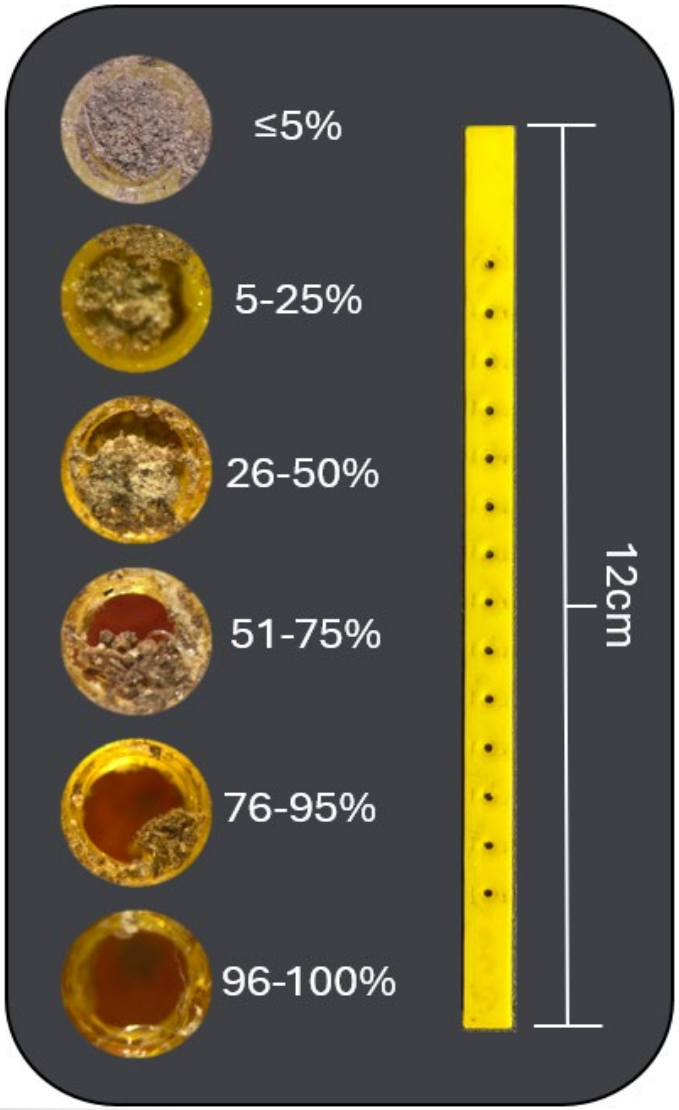
Bait Lamina Strip Testing



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Forb Mineral Testing Study

- Objective: to assess the forage quality of common pasture forbs compared to traditional grass species

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Soil Fertility Study

- Objective: to compare forage yield, quality, soil fertility, soil health, botanical composition, grazing selectivity, and economics of soil amendments

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National Resilience CAP Project

- Objective: to improve resilience of agricultural systems through the adoption of diverse perennial circular systems of forage and crop production
- Nationwide project led by UW-Madison

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Purposeful Cover Crop Project

- Objective: maximize cover crop potential through purposeful, site-specific cover crop planning and management
- Expansion from previous project – includes grain, livestock, specialty, and small-acreage farms

https://go.umd.edu/learnmorecovercrop

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Cultivating Conservation Project

- Enhancing Farmer Engagement in Agricultural Cost-Share and Incentive Programs in Maryland
- Objective: to increase the number of HU farmers, marginalized farmers, and farmers who are not yet customers of NRCS to familiarize them with conservation practices and increase their opportunities for technical and financial conservation support

Cultivating Conservation
IN MARYLAND AND DELAWARE

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Other Relevant Work

- Research and education on:
  - Saltwater intrusion
  - Nutrient management for agricultural crops
  - Cover crop management, termination timing
  - Drone scouting, diagnostics, seeding, applications
  - Beneficial insect prevalence
  - Organic weed management in vegetable crops
  - Organic pest control in vegetable crops
  - Smart irrigation strategies
  - Integrated weed management

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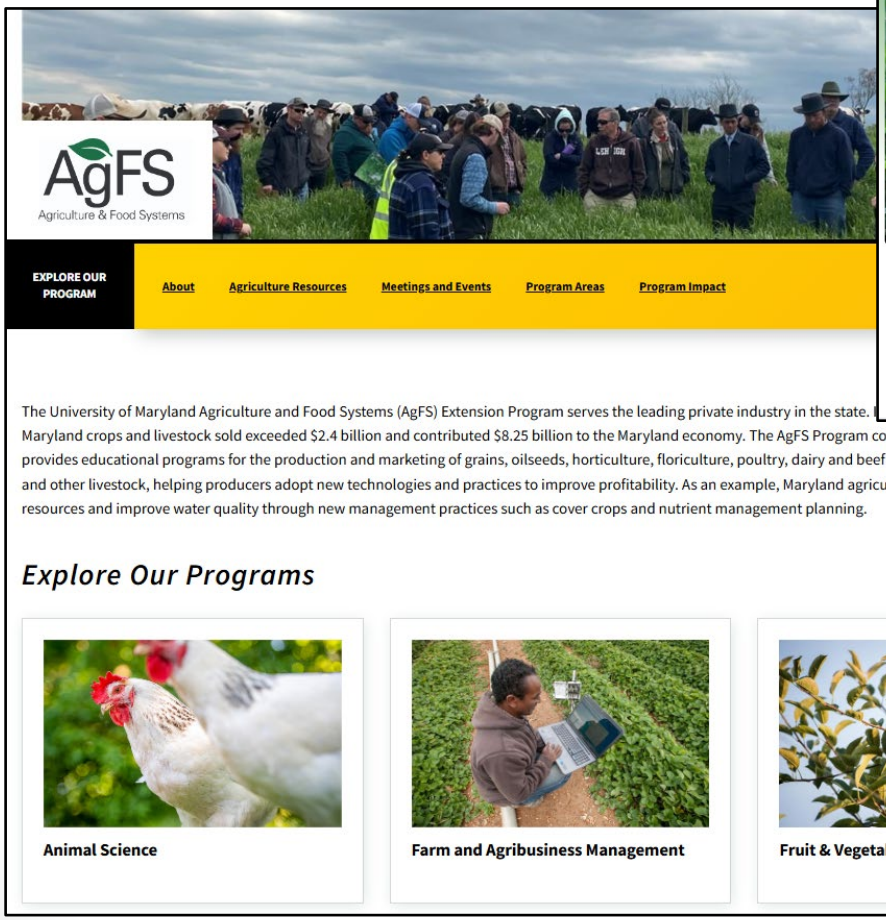
UMD Extension Online



https://extension.umd.edu/programs/agriculture-food-systems/

Thank You!

Amanda Grev, PhD
Forage Extension Specialist

Questions?
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301-226-7575

Find us online!
@Maryland Forages
go.umd.edu/forage

Monthly forage email updates: https://go.umd.edu/forageemails

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