

## Biographical Sketch

### **Thomas J. Basden, MS**

Title: Extension Specialist, Nutrient Management

Current Rank: Extension Associate Professor

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(304) 282-2239

### **Education**

West Virginia University: Morgantown, WV 26506

Plant and Soil Science, Horticulture, Bachelor of Science in Agriculture, 1981

Plant and Soil Science, Horticulture, Master of Science, 1990

### **Career History**

- WVU Extension Service: Extension Specialist, Nutrient Management and Extension Associate Professor.  
Dates: 2005- present
- West Virginia University Cooperative Extension Service: Extension Specialist (Project Director) Potomac Headwaters Water Quality Project, Moorefield, WV. Potomac Inter-Agency Water Quality Office.  
Dates: 05/94 TO 05/99
- West Virginia University Cooperative Extension Service: Assistant Extension Specialist, Crop Management - Lewisburg, WV, County Extension Office  
Dates: 07/90 - 05/94
- West Virginia University, College of Agriculture and Forestry, Division of Plant and Soil Sciences: Research Assistant/Technologist, Morgantown, West Virginia.  
Dates: 04/84-06/90
- West Virginia University, College of Agriculture and Forestry, Division of Plant and Soil Sciences: Laboratory Technician, Soil Testing Lab, Morgantown, West Virginia,  
Dates: 02/83 - 03/84.
- United States Government: Horticultural Extension Officer, Action Peace Corps, Washington DC.  
Dates: 01/82-12/83.

### **Synergistic Activities**

2002-Present          Member, NRCS State Technical Committee

2001-Present:          WV University/Extension Board Member of the Mid-Atlantic  
Certified Crop Advisors Advisory Board

2000-Present:          Nutrient Management Consultant Certificate, West Virginia  
Department of Agriculture

1996-Present:          American Society of Agronomy, Mid-Atlantic Certified Crop  
Advisor

### **Grants in Progress**

1. WV Manure Management Software Training Program using GIS-Based Tools and Development of Associated User Documentation. Principal Investigator: **Tom Basden**. Co-investigator: Jacquelyn Strager. Funding amount: \$15,000. Project Period 2018 to November 2021.
2. Strengthening a Wood Energy Team to Facilitate Bio-Business Development in West Virginia. Principal Investigator, J. Wang, S. Grushecky, D. DeVallance, **T. Basden** and J. Herholdt. USDA, Funding Amount: \$250,000
3. Prescribed Grazing Management, Training and Outreach to Improve Livestock Production on Grasslands in WV. Principal Investigator, T. Basden, Ed Rayburn, Kevin Shaffer, Louis McDonald and Tom Griggs. WV NRCS \$61,500. Project Period 2019 to November 2021
4. Soil Fertility Survey of Poultry Litter Amended Fields in Chesapeake Bay Counties and Litter Promotion Program in the North Central Counties in WV. National Fish and Wildlife Foundation Funding Amount: \$40,000. Project Period 2018 to February 2021
5. From Sale to Seed: Market-Driven High Tunnel Education for West Virginia Agriculture Service Providers, Growers and Vocational Agriculture. NESARE Professional Development. Funding Amount: \$112,771 Submission 10/15/2019 Period of Performance: 4/15/2020 to 9/15/2022

#### **Publications in Refereed Journals**

1. Sapkota, Y., B.L. Drake, L.M. McDonald, T.C. Griggs, and **T.J. Basden**. 2019. (In press, 11/27). Random forest regression predicts and corrects moisture content during portable X-ray fluorescence spectroscopic analysis of manure. Journal of Environmental Quality.
2. Sapkota, Y., L.M. McDonald, T.C. Griggs, **T.J. Basden**, B.L. Drake, 2019. Portable X-ray fluorescence spectroscopy for rapid and cost-effective determination of elemental composition of ground forage. Frontiers in Plant Science, Plant Nutrition. [doi.org/10.3389/fpls.2019.00317](https://doi.org/10.3389/fpls.2019.00317)
3. Christianson, L., D DeVallance, J. Faulkner and **T. Basden**. Scientifically Advanced Woody Media for Improved Water Quality from Livestock Woodchip Heavy-Use Areas. Frontiers of Environmental Science and Engineering, 2017, 11(3): 2 DOI 10.1007/s11783-017-0909-7
4. Rayburn, E.B., W. Shockey, D. Seymour, B. Smith and **T. Basden**. Calibration of Pasture Forage Mass to Plate Meter Compressed Height Is a Second-Order Response with a Zero Intercept. Crop, Forage, Turfgrass Management Volume 3. doi:10.2134/cftm2017.01.0003
5. Rayburn, E., W. Shockey, B. Smith, D Seymour and **T. Basden**. 2016. Light interception by Pasture Canopies as Affected by Height and Botanical Composition. Crop, Forage and Turfgrass Management, CFTM-2016-0013