



Systems to Balance Production and Environmental Objectives

**Overholt Drainage School
March 21-25, 2011**

- ▶ **Laser Surveying, Topographic Mapping, & GPS Mapping**
- ▶ **Agricultural Subsurface Drainage Systems Design**
- ▶ **Drainage Water Management: Controlled Drainage System Design and Installation**

Fulton County (Ohio) Fairgrounds, Junior Fair Building

Sponsored by: Overholt Drainage Education and Research Program, Food, Agricultural, and Biological Engineering, OSU Extension, OARDC, The Ohio State University, in cooperation with USDA-NRCS, USDA-ARS, Soil and Water Conservation Districts, Ohio Land Improvement Contractors and Associates

ADVANCED REGISTRATION REQUIRED

Register for full 5-day program or a combination of individual sessions. Registration includes: tuition, lunches, refreshments, materials, supplies, manuals, guides, design notebooks, certificates of completion, etc., as appropriate for session.

Deadlines: Early registration March 11. Final Registration March 17. Confirmations, directions, hotel list are mailed upon receipt of registration and payment. Partial refund if cancellation made by March 16

Bring: calculator; warm clothes, boots for field. **Enrollment limited: No walk-ins please.**

Program Objective: Provide continuing education for land improvement contractors, soil and water conservation technicians, farmers, engineers, consultants, sanitarians, and others

interested in advancing their knowledge of basic concepts, principles, and skills related to the purpose, design, layout, construction, and management of Soil and Water Conservation Systems, with emphasis on Water Management and Water Quality. Instructors include Land-Grant University Faculty/Staff, NRCS/ODNR/SWCD engineers and technicians, ARS engineers and scientists, and experienced OLICA contractors and associates.

**SESSION I: March 21-22 1 ½ days
Laser Surveying, Topographic Mapping, & GPS Mapping
Monday 9:00 AM to 9:00 PM
Tuesday 8:00 to 1:30 PM**

- ❑ Overview of Laser Surveying; Lenker Rod
- ❑ Field Notes Laser/ Using Lenker Rod
- ❑ Hands-on Field Layout and Survey
- ❑ Field Notes/Interpretation of Data
- ❑ Topographic Features and Contours, Plotting Field Data, Drawing Contours
- ❑ Developing Topographic Map
- ❑ Using Topographic Map Information
- ❑ Computer Applications
- ❑ GPS Applications, Drainage Systems Mapping

Extensive fieldwork, classroom instruction, evening work sessions. Basic knowledge of elevations required.

**SESSION 2: March 22-24 2 1/3 days
Agricultural Subsurface Drainage Design, & Installation
Tuesday 2:00 to 9:00 PM; Wednesday 8:00 AM to 9:00 PM; Thursday 8:00 to 6:00 PM**

- ❑ Agricultural Drainage Concepts; Soils Basics
- ❑ Drainage Guides
- ❑ Subsurface Drainage Design Concepts, Procedures, Sizing Laterals and Mains
- ❑ Design Exercises, Work Sessions
- ❑ Design Problem for Monday's Field Site
- ❑ Benefits and Economics of Drainage
- ❑ Environmental Considerations
- ❑ Installation Basics, Methods, Research
- ❑ Proper Installation and Common Mistakes
- ❑ Other Drainage Design Concepts

Extensive classroom instruction, work sessions, minor fieldwork possible, evening work sessions, programs. General understanding of drainage and leveling required. No formal program Thursday evening.

**SESSION 3: March 25 1 day
Drainage Water Management: Controlled Drainage System Design and Installation**

Friday 9:00 AM to 4:00 PM

- ❑ Agricultural Drainage Water Management: Concepts, Purpose, Benefits, Practices
- ❑ Midwest Initiative; Regional Projects
- ❑ Controlled Drainage Design
- ❑ Sizing Laterals and Mains
- ❑ Design Problems, Layout
- ❑ Installation, Operation and Management
- ❑ Drainage Collection and Pumping
- ❑ Drain Spacing and Depth Alternatives
- ❑ Opportunities with Drainage Management
- ❑ Drainage Outlets, Buffers, Other Applications

Extensive classroom instruction, work sessions, minor fieldwork possible, etc. Completion of a subsurface drainage design educational program encouraged.

Questions Contact Larry C. Brown
614.292.3826 or brown.59@osu.edu

The Overholt Drainage School is funded, in part, by your donations to the Overholt Drainage Education and Research Program Endowment at The Ohio State University. You may add a donation to the registration.

All educational programs conducted by Ohio State University Extension are available to clientele on non-discriminatory basis without regard to race, color, creed, religion, sexual orientation, national origin, gender, age, disability or Vietnam-era veteran status. Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Keith L. Smith, Director, Ohio State University Extension. TDD# 1(800)589-8292 (Ohio only) or (614)292-1868. 1/00-8M

