

The United States Tobacco GAP Program: An Overview from Creation to Implementation

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Outline

- Introduction to GAP
- GAP Background
- GAP program creation by industry, state, and university personnel
- Extension Agent & Grower training in NC
- Future of GAP program in USA



What is GAP?

- GAP aims to ensure sustainable and economically viable production of usable tobacco.
- GAP is comprised of three main components:
 - Crop Management
 - Environmental Management
 - Labor Management



Where Did GAP Come From?

- Individual companies created their own GAP programs and began training around 2010
 - GAP training/certification was required by specific companies
 - Barn testing & on-farm audits were conducted by the same companies
- Provided an avenue for accountability, traceability, and additional grower education.

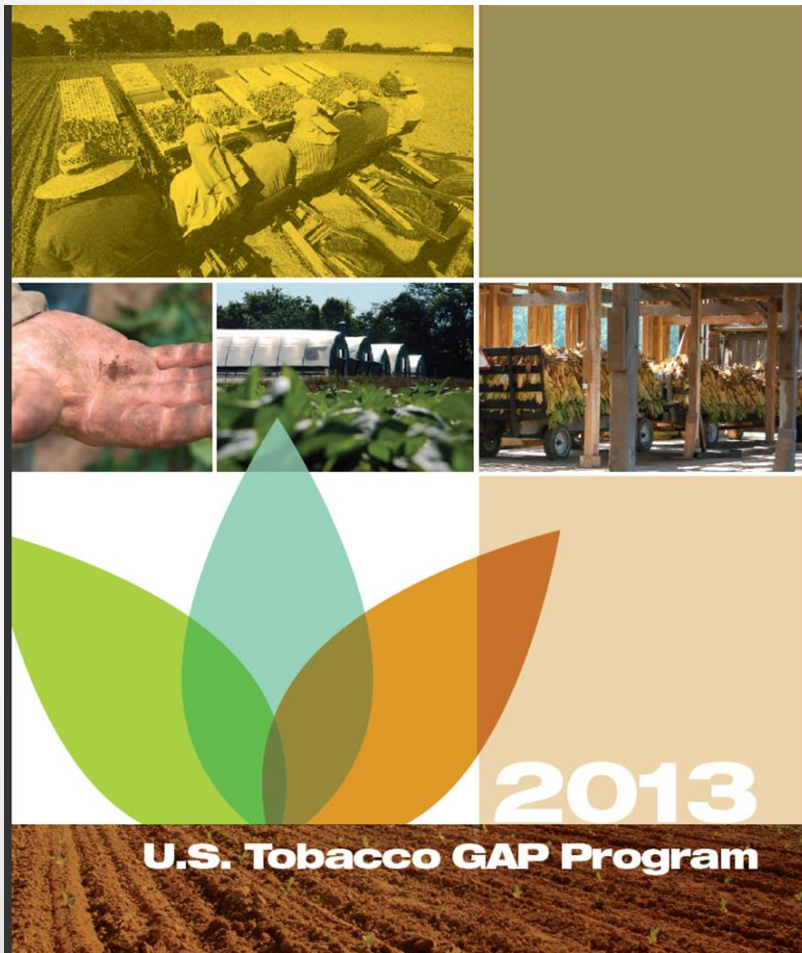


Issues with GAP

- This was very time consuming and redundant.
 - Varying degrees of implementation, but common goals and requirements were nearly uniform from company to company.
- Multi contract producer attending multiple meetings.
 - Flue-Cured: >68%
 - Dark-Air & -Fire: >55%
 - Burley: 20%
- Requirement of significant investment by the industry, growers, and Extension personnel.



Creation of the US Tobacco GAP Program



- Implemented in 2013
- Applies to **ALL** tobacco types
- Uniform training
- Uniform certification
- Uniform record keeping
- Only one GAP training
 - Annual recertification



How was the US Tobacco GAP program created?

- The industry, as a whole, decided that a uniform GAP program would be beneficial for all parties involved.
 - Industry
 - Producer
 - Allied Agencies (Extension, State Government, etc.)
- In 2012, under the guidance of the NCDACS, groups with tobacco interest began meeting in Raleigh, NC to develop the framework for GAP.



Objectives

- To create a GAP program which:
 - Provided Uniform GAP manuals for all US tobacco growers
 - Provided uniform record keeping requirements
 - Provided a uniform training requirement
 - Provided uniform barn testing for flue-cured producers
 - Provided a uniform audit



US Tobacco GAP Program

- Crop Management:
 - Variety Integrity & Selection
 - Integrated Pest Management
 - Nutrient Management
 - Crop & Operation Management
 - Curing & Barn Management
 - Non-Tobacco Related Material (NTRM)
 - On-Farm Tobacco Storage
- Environmental Management:
 - Soil & Water Management
 - Agrochemical Management
- Labor Management:
 - Laws & Regulations
 - Farm Labor Related Issues
 - Farm Safety & Worker Training



US Tobacco GAP Program

- Each subsection contains three specific areas of focus:
 - General Good Agricultural Practices
 - Required Documentation
 - Inspection Check Off List for On-farm Audit
- Each was added for grower assistance with the program.



Meeting Structure in North Carolina

- Tobacco Extension Agent GAP training.
- Mandatory Extension meetings for producers
 - GAP training occurred
 - Entire GAP manual introduced
 - Extension research updates
 - Meetings typically lasted >3 hours
- Producers given certificate at conclusion of meeting.
- Over 2000 producers certified in North Carolina
- Video made for those who missed a meeting



CERTIFICATE OF ATTENDANCE

US Tobacco
GOOD AGRICULTURAL PRACTICES
2012/2013 Training



Provided By



NC STATE UNIVERSITY



University Representative

Grower

Flue-Cured Barn Testing

- Flue-cured barn heating system integrity evaluation
- Heating systems must be tested every 3 years for CO₂ emissions
- All entities testing barns utilizing this procedure must attend a Cooperative Extension training
- Gas suppliers, barn service technicians, growers, and other entities are eligible, but must attend training
- Common testing procedure and reporting form



Carbon Dioxide Testing Procedure

- Barn is at ambient temperature and empty (no green leaf)
- Fan is on, heat off, fan intake vents closed
 - Ambient (initial) CO₂ level recorded
- Thermostat advanced 30°F above ambient temperature to allow burner to operate for at least 10 minutes continuously
 - Monitor and record the CO₂ level (@ 10 minutes) for second measurement
- Difference between the ambient and 10 minute CO₂ measurements must be < 200 ppm to pass



Committee Members

Endorsed by:

Alliance One International, Inc.

American Snuff Company

Burley Stabilization Corporation, Inc.

Hail and Cotton, Inc.

John Middleton Company

JTI Leaf Services (US), LLC

Lorillard Tobacco Company

Philip Morris International

Philip Morris USA

R.J. Reynolds Tobacco Company

Santa Fe Natural Tobacco Company

United Tobacco Company

Universal Corporation

US Smokeless Tobacco Company

US Tobacco Cooperative



Committee Members

In Partnership With:

Center for Tobacco Grower Research

Clemson University

North Carolina Department of Agriculture & Consumer Services

North Carolina Farm Bureau

North Carolina Growers Association

North Carolina State Grange

North Carolina State University

South Carolina Department of Agriculture

Tobacco Growers Association of North Carolina

University of Kentucky

University of Georgia

University of Tennessee

Virginia Department of Agriculture and Consumer Services

Virginia Farm Bureau Federation

Virginia Polytechnic Institute and State University



Future of the US Tobacco GAP Program

- Recertification credits for producers
 - Specific GAP topics will be incorporated into annual production meetings
 - Video available for new producers
- Discussion underway for a uniform audit system.
- Discussion underway for record keeping software.
- Discussion underway for grower ID system



Questions??

