

Cigar Tobacco Production in Pennsylvania (PA)

Ben Green
Michael D. Hartley

Lancaster Leaf Tobacco Company of Pennsylvania
Lancaster, PA, USA



Outline

- Cigar tobacco defined
- History of cigar tobacco in Pennsylvania
- Cigar industry in Pennsylvania
- Current tobacco farming in Pennsylvania
- Lancaster Leaf's wrapper focus
- Conclusion

Cigar tobacco defined

Filler: tobacco leaves that make up the inside of a cigar

Binder: tobacco leaf used to hold together the filler

Wrapper: -tobacco leaf used as the outer covering of a cigar
-usually requiring a uniform, pretty appearance

Cigar tobacco defined (continued)

WRAPPER



• The Wrapper is the outer cover of a cigar and thus must be uniform in color and structure. A Wrapper must have good stretch, oil, cleanliness, and be free from any blemishes on both sides. If the leaf has holes then they must be minimal and either at the tip or butt of the leaf. Any large holes will disqualify the leaf as a Wrapper. Wrapper leaves must be at least 9 inches wide and lack a tight tip. **Wrapper leaves can have a hole 3 inches down from the tip or 3 inches up from the butt of the leaf.**



BINDER



• The Binder is the second layer of a cigar and holds the filler in place. A binder can have two holes the size of a nickel or one hole the size of a quarter. The holes should only be on one side of the leaf. Small blemishes are acceptable on the Binder but consistent quality is very important. One side must be clean with the same properties as a Wrapper.



FILLER



• Straight Strip are the leaves that do not pass as Wrapper or Binder. These leaves must still have good size and body, but can have holes and blemishes.



TRASH



• Filler is any leaf that may be heavily damaged, have little life, or inconsistency in color. Any rotten, moldy, or dead tobacco should be discarded and should never be mixed in with filler.



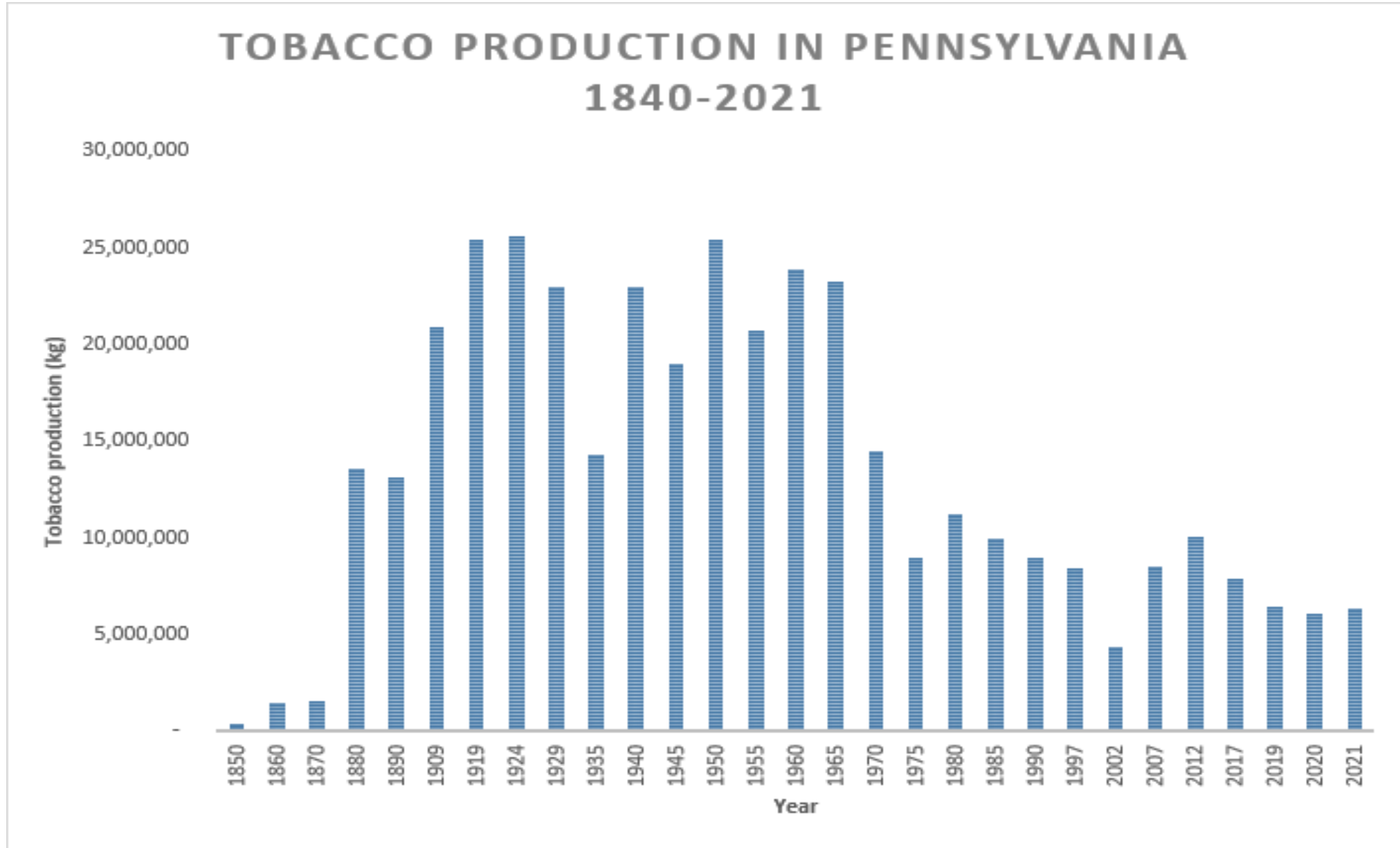
Cigar tobacco defined (continued)



History of Tobacco in Pennsylvania

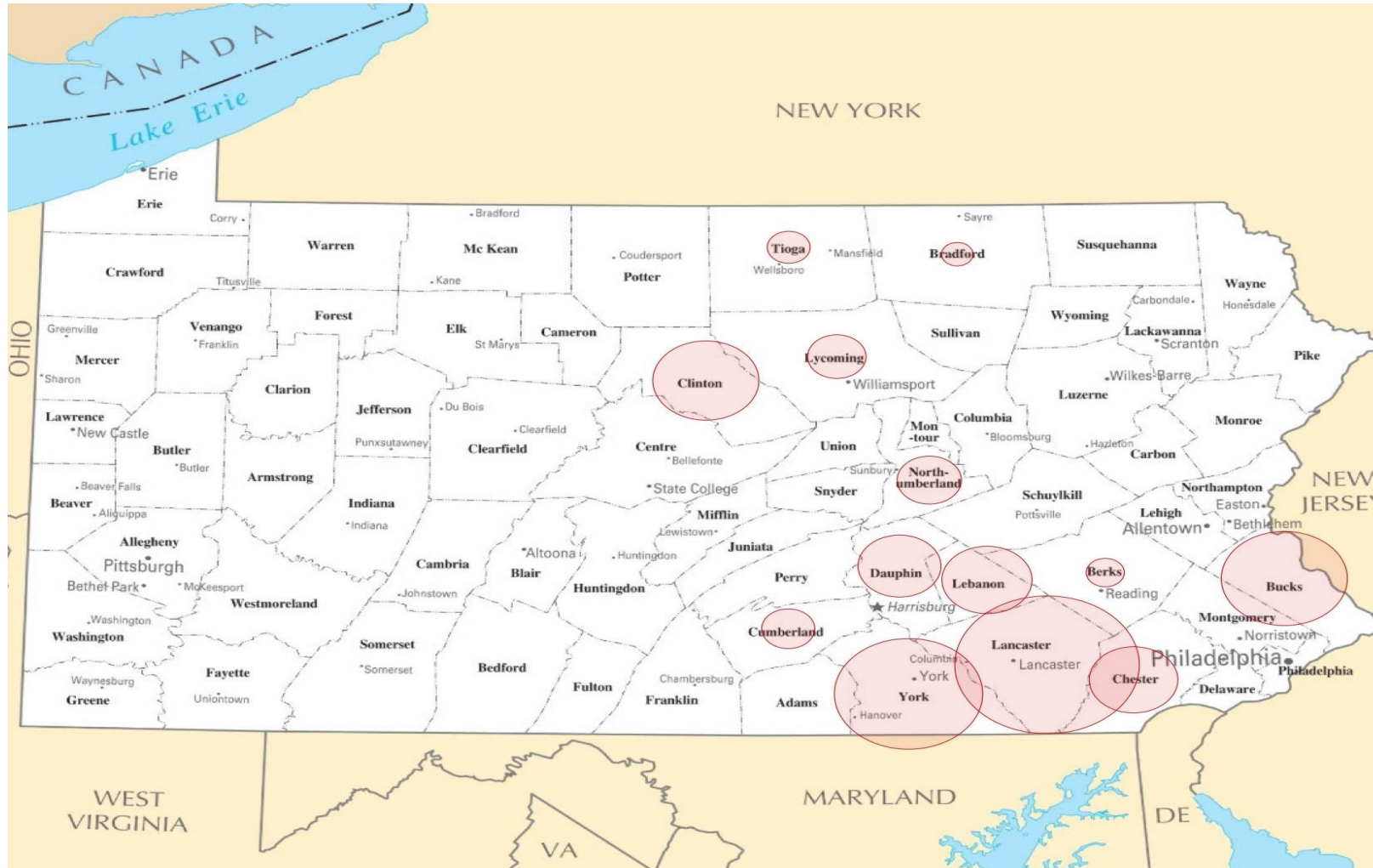
- Tobacco is more deeply rooted in our history than any other commodity. Commerce in tobacco was the economic salvation of the struggling Jamestown colony in Virginia - 1612. Tobacco was a powerful magnet drawing new colonizing enterprises, attracting Europeans to the colonies.⁷
- Tobacco farming in Pennsylvania began in 1631 when the Dutch established a colony whose main purpose was the production of tobacco to export to Europe.¹⁰
- Early settlers were farming the wrong areas and using the wrong seeds.¹⁰
- The introduction of cigar-leaf tobacco into Pennsylvania probably did not occur until 1828, when several acres of Connecticut Broadleaf were grown in the vicinity of Ephrata, Lancaster County.¹
- Only after 1830 did tobacco become a profitable crop in the state.¹⁰
- Lancaster County continues to hold its place among the top U.S. tobacco-producing counties.

History of Tobacco in Pennsylvania (continued)¹

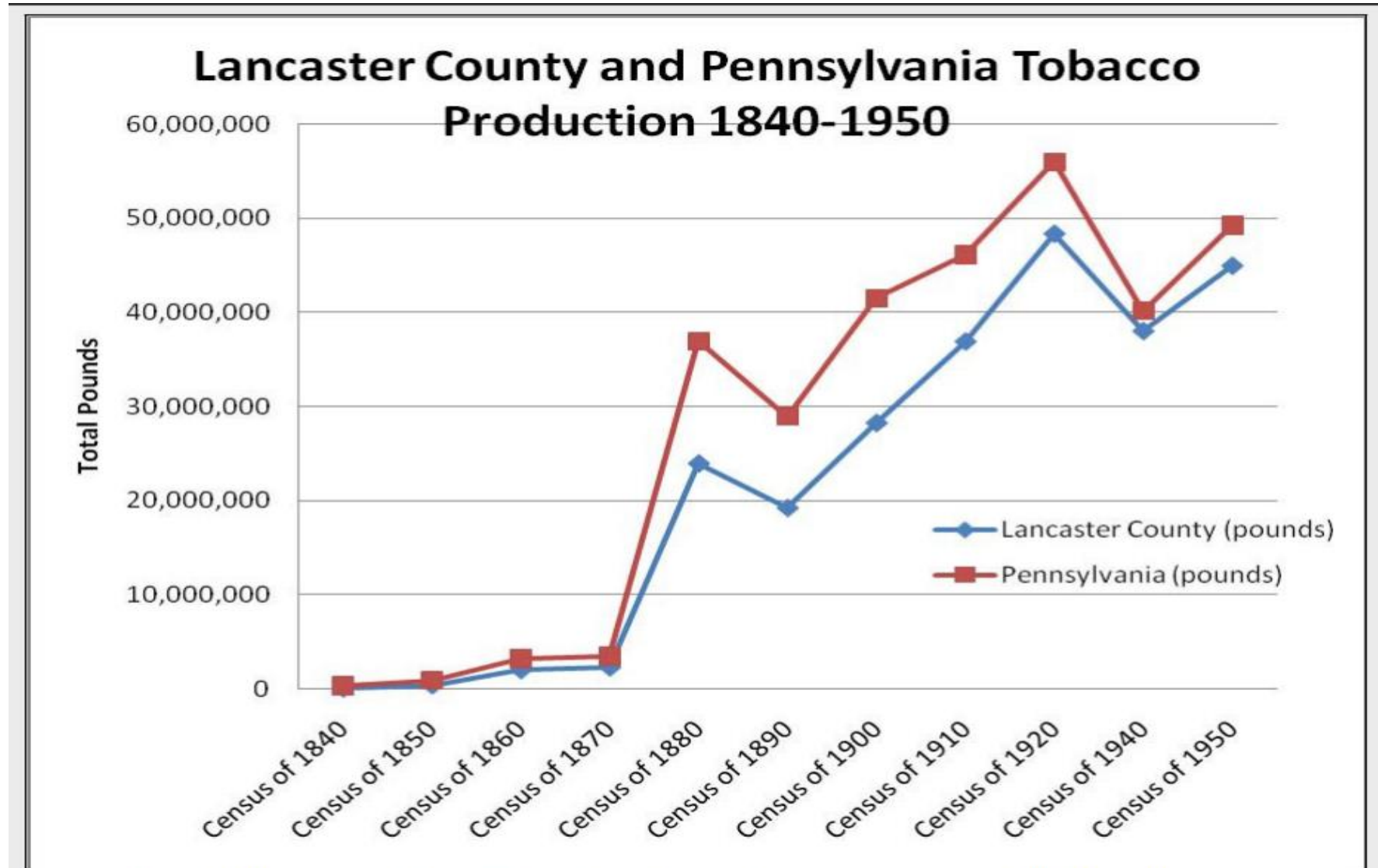


History of Tobacco in Pennsylvania (continued)³

1879 Pennsylvania Tobacco Growing Areas



History of Tobacco in Pennsylvania (continued)



Figures from the US Census of Agriculture. Year-by-year figures also appear in the Pennsylvania Department of Agriculture Yearbook.

History of Tobacco in Pennsylvania (continued)

- The preeminence of Lancaster County as a tobacco producer was due to the cultural traits of the Germans immigrants to PA. These Germans or Deutch became to be known as “Dutch”.²
- These immigrants brought with them knowledge of crop rotation and strip farming, used at home since the Middle Ages. These factors paved the way for Lancaster County’s later emergence as a center for cigar leaf tobacco.⁶
- From the earliest settlements, most of the work of the Pennsylvania Germans was done by the Germans themselves with the aid of their families and with the cooperation of their neighbors. At present, there is very little hired labor among Amish or Mennonites. In Lancaster County the average size of an Amish family is over seven persons.²
- This concentration of tobacco growing skills within the Amish household has perpetuated tobacco production in Lancaster County or wherever the tobacco growing Amish family has settled.²

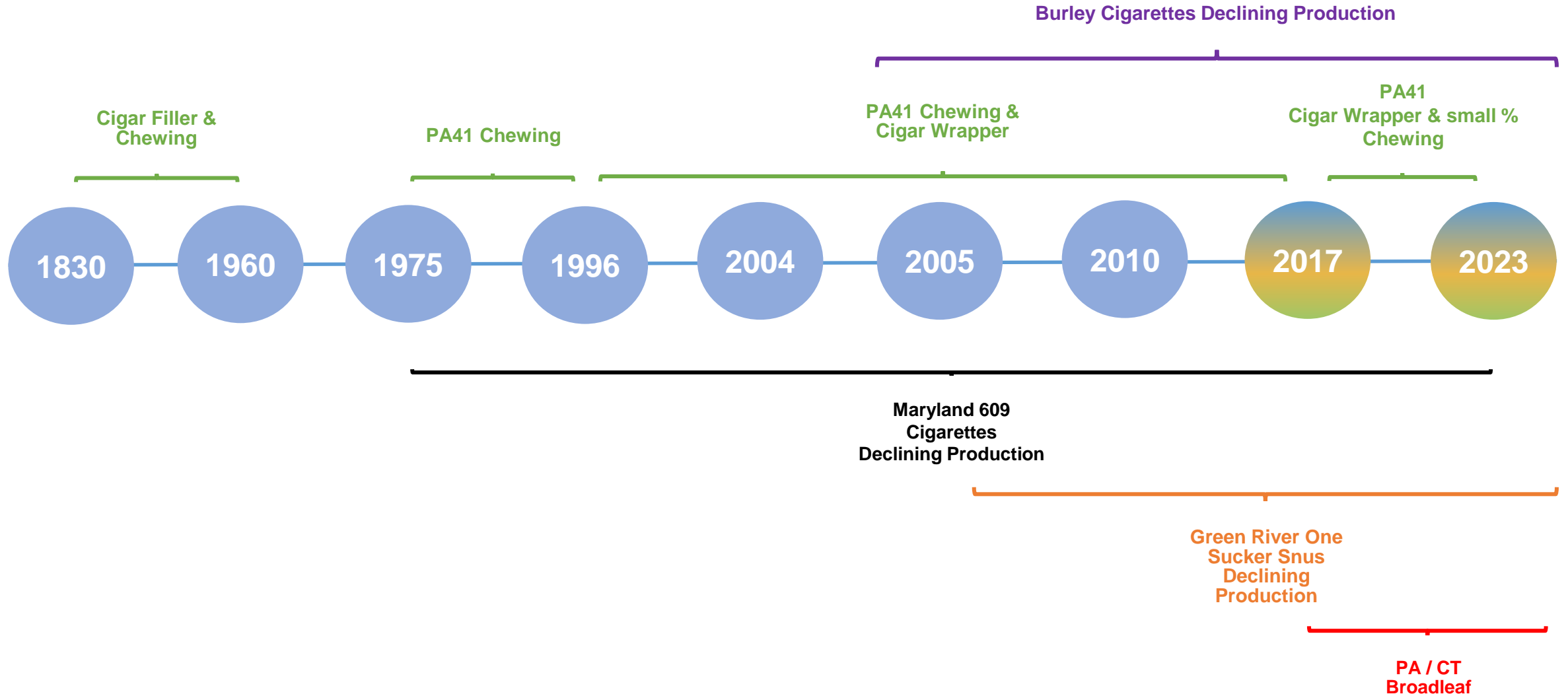
History of Tobacco in Pennsylvania (continued)

- Around 1892, prominent tobacco farmers organized the Lancaster County Tobacco Growers' Society to foster research into cultivation methods. Working closely with the state and later joined by the U.S. department of Agriculture, it was instrumental in establishing a tobacco field station around 1910 at Ephrata, where it developed several leaf types especially for local soil and climate.⁶
- The Tioga County history of 1883 reported: The amount of tobacco raised on a hectare is from 1,680 – 2800 kg.⁸
- The signature characteristic of this era was development. Between the post-Civil War years and the Great Depression, Lancaster County farming families added multiple layers to their agricultural system, while eliminating few. The single most important addition to the farming system was tobacco.⁹

History of Tobacco in Pennsylvania (continued)

- The tobacco produced in Pennsylvania is dark and rather heavy and therefore useful chiefly as a cigar filler compared to Wisconsin a binder, and that of Connecticut for wrappers.³
- A well- defined demand exists for the cigar-filler tobacco produced in Pennsylvania, and it is used extensively in the manufacture of domestic cigars because of its excellent blending qualities. It is well adapted for this purpose because of its texture, flavor, and aroma.¹

History of Tobacco in Pennsylvania (continued)



Cigar industry in Pennsylvania

- The first U.S. retail cigar store had been opened in Lancaster by the Demuth family in 1770.⁶
- In the 1810 census it was the only state in which cigar factories were recorded. Of 29 million American cigars produced that year, 27 million were made by skilled rollers at plants in Philadelphia city and county. Nearly 4 million were “Spanish seegars”, made largely from imported tobacco and resembling cigars imported from the West Indies. In the same census, the state ranked second in manufacture of other tobacco products.⁶
- By 1880 Pennsylvania ranked second only to New York among the states manufacturing tobacco. There were, in that year, 3,204 cigar “establishments”, in various parts of the state.⁵
- At the close of the year 1918, 1,962 cigar factories were in operation in Pennsylvania.⁴
- More cigars than were manufactured in any other state – almost 3.5 billion of them – were rolled out of Pennsylvania's factories in 1960 while other plants produced smoking and chewing tobacco and cigarettes.⁵

Current tobacco farming in Pennsylvania

95% Old Order Amish and Mennonite

- Average Farm Size
 - 20 hectares
- Tobacco Farmed
 - 2 hectares
 - Family Labor/traded labor

5% Other (English)

- Average Farm Size
 - 40 hectares
- Tobacco Farmed
 - 4.9 hectares
 - Hired labor/traded labor

Note: Total farm plan include other crops and activities such as vegetables, corn, hay, dairy, poultry, and swine operations

Current tobacco farming in Pennsylvania (continued)

Amish and Mennonite

- Swiss/German background.
- Anabaptist Christian Group
- Immigrated to North America to escape religious persecution.
- Horse and/or mules used for transportation and farming operations
- Reject modern technology.
 - Cars
 - Computers
 - Cell phones
 - Electricity

Current tobacco farming in Pennsylvania (continued)

Amish and Mennonite

- They take pride in farming.
 - Cultural heritage
 - Business oriented.
 - Wrapper tobacco = more profit/investment
 - Farms well maintained and manicured.
- Tobacco farming is family time.
 - Grading tobacco in winter.
 - Keeps family close to the farm.
 - Singing in grading room.



Current tobacco farming in Pennsylvania (continued)

- Limestone soils
 - Well drain soils
 - Very fertile
 - Non-irrigated crops
- Climate during growing season
 - Warm days and cool nights
 - Timely rains
 - Forgiving curing season



Current tobacco farming in Pennsylvania (continued)

Production issues

- Angular Leaf Spot (*Pseudomonas syringae* pv. *tabaci*)
- Blue Mold (*Peronospora tabacina*)
- Frogeye Leaf Spot (*Cercospora nicotianae*)
- Target Spot (*Rhizoctonia solani*)
- Tobacco Aphids (*Myzus Nicotianae*)
- Flea Beetles (*Epitrix hirtipennis*)
- Budworms (*Heliothis virescens*)
- Hornworms (*Manduca sexta*)
- Grasshoppers (*Melanoplus differentialis*)
- Japanese Beetles (*Popillia japonica*)

Current tobacco farming in Pennsylvania (continued)

- Environmental laws impact agricultural land use.
 - Clean Waters Act of 1972 - Restore and maintain the integrity of the nation's waters
 - Chesapeake Bay Executive Order
- Farmers implement best practices.
 - Contour farming
 - No-till farming
 - Buffer strips
 - Liquid manure storage
 - Grassed waterways
 - Streambank stabilization
 - Terraces



Current tobacco farming in Pennsylvania (continued)



Current tobacco farming in Pennsylvania (continued)



Current tobacco farming in Pennsylvania (continued)



Current tobacco farming in Pennsylvania (continued)



Current tobacco farming in Pennsylvania (continued)



Current tobacco farming in Pennsylvania (continued)



Current tobacco farming in Pennsylvania (continued)



Current tobacco farming in Pennsylvania (continued)



Current tobacco farming in Pennsylvania (continued)



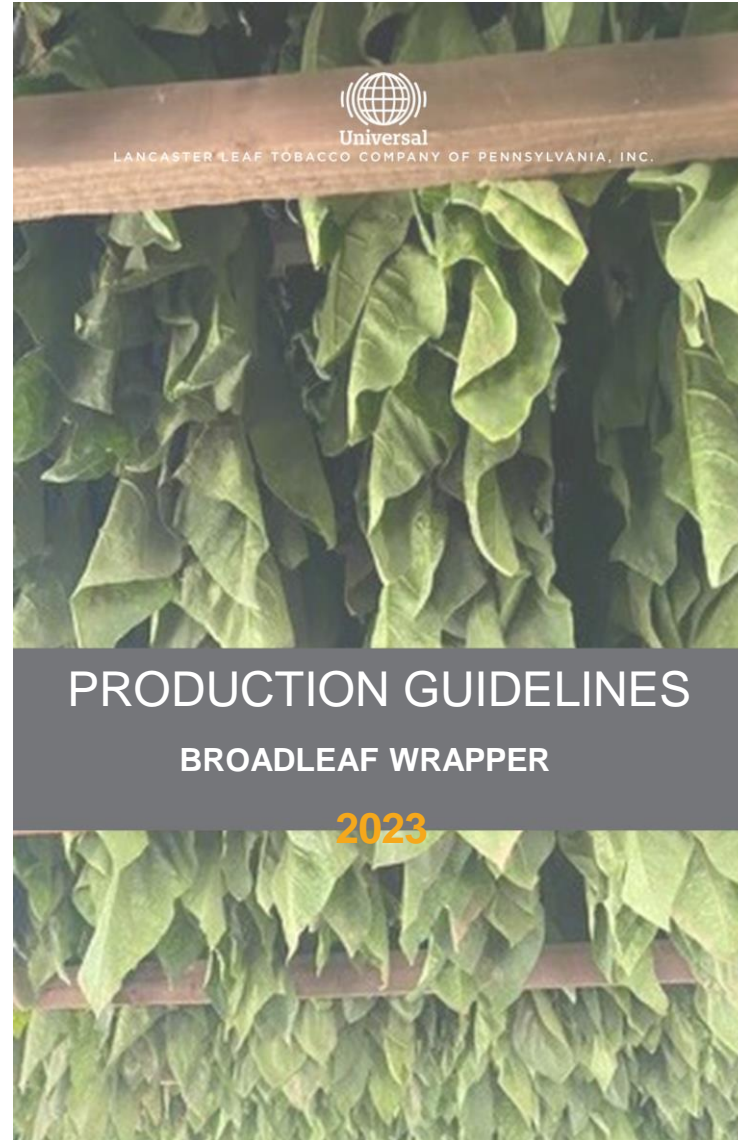
Current tobacco farming in Pennsylvania (continued)



Current tobacco farming in Pennsylvania (continued)



Lancaster Leaf's wrapper focus



Lancaster Leaf's wrapper focus (continued)

PA Spray Program			
Application	Days after Transplanting	Commercial Name	
1	-7	Capture (Bifenthrin)	Capture or Bifenthrin will help to control flea beetle larva and cutworms.
	-7	Prowl	The -7 means 1 week before you transplant. You can use any herbicide labeled for tobacco.
	-7	Spartan	
2	0	Coragen	You can use these products in your transplant water.
	0	Admire or Platinum	
	0	Orthene	
3	14	Manzate	
	14	Forum	
4	21	Quadris	Spray by itself and in the evening.
5	28	Manzate	
	28	Forum	
	28	Assail or Orthene	
6	35	Manzate	
	35	Forum	
7	42	Nordox	Spray by itself and in the evening.
8	49	Orondis Ultra	Recommended to make a separate application away from the insecticides.
	49	Coragen	
	49	Admire	Make sure you are using the correct rate of Admire.
	49	Orthene	
9	56	Presidio	
10	60	Off Shoot T	
	60	Prime +	
Agrimony sprayed as necessary for Angular leaf spot.			
*This chart is for ideal growing conditions and should be used as a base and adjusted to weather conditions.			

SORTING PA-41 TOBACCO



Universal

LANCASTER LEAF TOBACCO COMPANY OF PENNSYLVANIA, INC.

WRAPPER

BINDER

STRAIGHT STRIP

FILLER



The Wrapper is the outer cover of a cigar and thus must be uniform in color and structure. A Wrapper must have good stretch, oil, cleanliness, and be free from any blemishes on both sides. If the leaf has holes then they must be minimal and either at the tip or butt of the leaf. Any large holes will disqualify the leaf as a Wrapper. Wrapper leaves must be at least 9 inches wide and lack a tight tip. **Wrapper leaves can have a hole 3 inches down from the tip or 3 inches up from the butt of the leaf.**

The Binder is the second layer of a cigar and holds the filler in place. A binder can have two holes the size of a nickel or one hole the size of a quarter. The holes should only be on one side of the leaf. Small blemishes are acceptable on the Binder but consistent quality is very important. One side must be clean with the same properties as a Wrapper.

Straight Strip are the leaves that do not pass as Wrapper or Binder. These leaves must still have good size and body, but can have holes and blemishes.

Filler is any leaf that may be heavily damaged, have little life, or inconsistency in color. Any rotten, moldy, or dead tobacco should be discarded and should never be mixed in with filler.



Lancaster Leaf's wrapper focus (continued)



Lancaster Leaf's wrapper focus (continued)



Conclusion

- High demand for cigar wrapper.
- Dedicated farmer base
- Amish migration
 - Taking cigar tobacco production with them
 - Tobacco Expansion 1 PA Hectare= 6 Hectares elsewhere



Conclusion (continued)

- Tobacco is a very important “cash” crop with approximately 3,700 hectares grown in Pennsylvania each year, with the majority grown by these Amish farms.
- A hectare of wrapper tobacco can generate up to \$24,000 in gross income, which is especially important with the current volatile milk prices. ¹¹
- Total 2022 Pennsylvania tobacco value US \$46,477,000.

References

1. Census Gov (1850) *1850 census: Compendium of the Seventh census, United States Census Bureau*. Available at: <https://www2.census.gov/library/publications/decennial/1850/1850c/1850c-06.pdf> (Accessed: 29 September 2023). – Page 174
 - NASS - National Agricultural Statistics Service (no date) USDA. Available at: <https://www.nass.usda.gov/> (Accessed: 29 September 2023).
 - J.R. Dogde (1880) *Statistics of Manufactures of Tobacco and of its Commercial Distribution, Exportation and Prices*. Available at: https://agcensus.library.cornell.edu/wp-content/uploads/1880a_v3-19.pdf (Accessed: 29 September 2023).
 - Creek, L., Capehart, T. and Grise, V.N. (1994) U.S. tobacco statistics, 1935-92, USDA ERS. Available at: <https://www.ers.usda.gov/publications/pub-details/?pubid=47093> (Accessed: 28 September 2023). – Page 128
2. Frear, William and E.K. Hibshman, and Otto Olson. THE CIGAR TOBACCO INDUSTRY IN PENNSYLVANIA. General Bulletin No. 371. Harrisburg: PA Department of Agriculture, 1922
3. Department of Agriculture (USDA) National Agricultural Statistics Service - Data and Statistics (2022) *2022 State Agriculture Overview, USDA/NASS 2022 State Agriculture Overview for Pennsylvania*. Available at: https://www.nass.usda.gov/Quick_Stats/Ag_Overview/stateOverview.php?state=PENNSYLVANIA (Accessed: 25 September 2023).

Bibliography

1. Olson, O., & United States. Dept. of Agriculture. (1929). *Cigar-tobacco production in Pennsylvania*. U.S. Government Printing Office.
2. Good, D. B. (1982). The localization of tobacco production in Lancaster county, Pennsylvania. *Pennsylvania history*, 49(3), 190–200.
3. United States. Dept. of Agriculture, Frear, W., & Hibshman, E. K. (1918). *The production of cigar-leaf tobacco in Pennsylvania*. U.S. Department of Agriculture.
4. Frear, W., Hibshman, E. K., & Olson, O. (1922). *The Cigar Tobacco Industry in Pennsylvania* (Vol. 5). Pennsylvania Dept. of Agriculture.
5. *Pennsylvania & Tobacco: A Chapter in America's industrial growth by the Tobacco Institute – 1961*.
6. *Pennsylvania & Tobacco: A Chapter in America's industrial growth by the Tobacco Institute – 1980*.
7. *Tobacco deeply rooted in America's Heritage* published by the Tobacco Institute Washington D.C

Bibliography

8. Pennsylvania Historical and Museum Commission (1997) *Agricultural Resources of Pennsylvania, c 1700-1960 River Valleys*
9. *Lancaster Plain, c. 1730-1960* (2013) Pennsylvania Historical & Museum Commission.
10. Elz, Klaus Dieter. *THE MARKET STRUCTURE OF THE PENNSYLVANIA CIGAR INDUSTRY*. Pennsylvania State University Doctoral dissertation for the Department of Agricultural Economics and Rural Sociology, 1963. Xerox.
11. Graybill, J.S. (2023) *No-till innovations in tobacco, Penn State Extension*. Available at: <https://extension.psu.edu/no-till-innovations-in-tobacco> (Accessed: 20 September 2023).

Thank you!



Barn Raising

