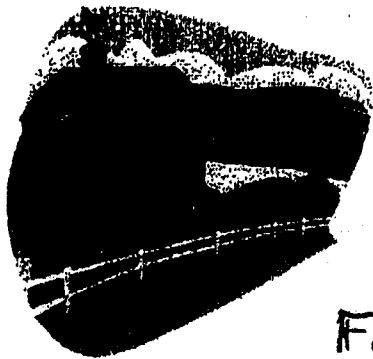


**Lehigh County Agricultural Land Preservation Board**

Lehigh County Agricultural Center, Suite 105  
4184 Dorney Park Road, Allentown, PA 18104  
Phone: 610-391-9583  
Fax: 610-391-1131



FAX

5 pages  
including cover

To: Karl Schreiter

From: Jeffrey W. Zehr, Farmland Preservation Specialist, ext. 15  
Beverly W. Weaver, Farmland Preservation Program Assistant, ext. 14

Date: 6-9-03

Re: Prime soils in Lehigh Co.

For your information

For your use

For your review/comments

For your action

For your files

As per your request

For your signature

Return to me

Comments:

## Lehigh County Relative Soil Values

Map Symbol	Farmland Importance	Capability Class	Relative Value
AbC	S	3E	48
AfA	P	1	100
AfB	P	2E	100
AnA	0	4W	36
AnB	0	4W	36
AoB	0	7S	0
ArA	P	1	100
ArB	P	2E	84
ArC	S	3E	72
ArD	0	4E	48
BfA	P	2S	84
BfB	P	2E	72
BfC	S	3E	55
BhD	0	4E	36
BkA	S	2S	72
BkB	S	2E	55
BkC	S	3E	48
BkD	0	4E	31
BkF	0	7E	0
BmA	P	1	100
BmB	P	2E	100
Bo	0	4W	36
BtA	0	4W	36
BtB	0	4W	36
BuB	P	2E	72
BvB	0	7S	0
BvD	0	7S	0
BwB	S	3W	48
CaB	S	3S	48
CaC	0	4S	36
CaD	0	6E	31
CmA	P	2W	72
CmB	P	2E	72
CpA	P	2W	72
CpB	P	2E	72
CwA	0	4W	36
CwB	0	4W	36
DbA	P	1	100
DbB	P	2E	100
DfC	S	3E	72

DfD	0	4E	48
EdD	0	7S	0
EhB	P	2E	84
EhC	S	3E	72
EhD	0	4E	48
Fb	0	5W	0
Gc	S	2W	84
GeA	P	2E	100
GeB	P	2E	100
GeC	S	3E	84
GeD	0	4E	48
GfB	0	6S	0
GfD	0	6S	0
GfF	0	7S	0
GnA	P	2W	72
GnB	P	2E	72
GnC	S	3E	48
HeB	0	7S	0
HeD	0	7S	0
HeF	0	7S	0
HgF	0	7S	0
Ho	S	3W	48
KfF	0	7E	0
LaB	P	2E	72
LaC	S	3E	55
LaD	0	4E	36
LbB	0	7S	0
LbD	0	7S	0
LbF	0	7S	0
LdF	0	7S	0
LfA	0	4W	36
LmB	P	2W	55
LmC	S	3E	48
Lv	P	1	100
Me	P	2W	84
MgB	P	2E	72
MfB	P	2E	72
MfC	S	3E	55
MuB	P	2E	84
MuC	S	3E	72
NaB	P	2E	100
NaC	S	3E	84
NaD	0	4E	48
NhB	0	7S	0

NhD	0	7S	0
NhF	0	7S	0
PeB	P	2E	72
PeC	S	3E	48
PeD	0	4E	36
PkC	S	3E	48
PkD	0	4E	31
Qu	0		0
RcA	P	2W	72
ReB	S	2E	72
ThA	0	4W	36
ToA	0	4W	36
ToB	0	4W	36
TwB	0	7S	0
Ua	0		0
UgB	0	8S	0
UgC	0	8S	0
Uh	0		0
UkB	0		0
UkD	0		0
UmB	0	8S	0
UmD	0	8S	0
UnB	0	8S	0
UnD	0	8S	0
UsB	0	8S	0
UsD	0	8S	0
UvB	0	8S	0
UxB	0	8S	0
W	0		0
w	0		0
WaA	P	1	100
WaB	P	2E	100
WaC	S	3E	84
WaD	0	4E	48
WeB	S	3E	48
WeD	0	6E	31

USDA-NRCS

NRCS Reports

Soil Survey Division

Lehigh County, Pennsylvania  
 Table Y.--Prime Farmland

Pri

(Only the soils considered prime farmland are listed. Urban or built-up areas of the not considered prime farmland. If a soil is prime farmland only under certain conditions are specified in parentheses after the soil name.)

Map symbol	Soil name
AfA	ALLENWOOD SILT LOAM, 0 TO 3 PERCENT SLOPES
AfB	ALLENWOOD SILT LOAM, 3 TO 8 PERCENT SLOPES
AyA	ARENDSVILLE GRAVELLY SILT LOAM, 0 TO 3 PERCENT SLOPES
AzB	ARENDSVILLE GRAVELLY SILT LOAM, 3 TO 8 PERCENT SLOPES
BfA	BEDINGTON-BERKS COMPLEX, 0 TO 3 PERCENT SLOPES
BfB	BEDINGTON-BERKS COMPLEX, 3 TO 8 PERCENT SLOPES
BmA	BIRDSBORO SILT LOAM, 0 TO 3 PERCENT SLOPES
BmB	BIRDSBORO SILT LOAM, 3 TO 8 PERCENT SLOPES
BuB	BUCHANAN GRAVELLY LOAM, 3 TO 8 PERCENT SLOPES
CmA	CLARKSBURG SILT LOAM, 0 TO 3 PERCENT SLOPES
CmB	CLARKSBURG SILT LOAM, 3 TO 8 PERCENT SLOPES
CpA	COMLY SILT LOAM, 0 TO 3 PERCENT SLOPES
CpB	COMLY SILT LOAM, 3 TO 8 PERCENT SLOPES
DbA	DUFFIELD SILT LOAM, 0 TO 3 PERCENT SLOPES
DbB	DUFFIELD SILT LOAM, 3 TO 8 PERCENT SLOPES
EhB	EDGEMONT CHANNERY LOAM, 3 TO 8 PERCENT SLOPES
GeA	GLADSTONE GRAVELLY SILT LOAM, 0 TO 3 PERCENT SLOPES
GeB	GLADSTONE GRAVELLY SILT LOAM, 3 TO 8 PERCENT SLOPES
GnA	GLENVILLE SILT LOAM, 0 TO 3 PERCENT SLOPES
GnB	GLENVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES
LaB	L Aidig GRAVELLY LOAM, 3 TO 8 PERCENT SLOPES
LmB	LEHIGH CHANNERY SILT LOAM, 3 TO 8 PERCENT SLOPES
Lv	LINDEN LOAM
Me	MIDDLEBURY SILT LOAM
MgB	MONONGAHELA SILT LOAM, 3 TO 8 PERCENT SLOPES
mlB	MOUNT LUCAS SILT LOAM, 3 TO 8 PERCENT SLOPES
MuB	MURRILL GRAVELLY LOAM, 3 TO 8 PERCENT SLOPES
NaB	NESHAMINY SILT LOAM, 3 TO 8 PERCENT SLOPES
PeB	PENN CHANNERY SILT LOAM, 3 TO 8 PERCENT SLOPES
ReA	READINGTON SILT LOAM, 0 TO 3 PERCENT SLOPES
WaA	WASHINGTON SILT LOAM, 0 TO 3 PERCENT SLOPES
WaB	WASHINGTON SILT LOAM, 3 TO 8 PERCENT SLOPES

# **NASIS Reports Access**

## **USDA-NRCS Soil Survey Division**

**[Prototype NASIS Data Access Site]**

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This website is a **prototype** providing web access to NASIS reports. At this time, it is not meant for public use and may be removed at any time. Users should be cautious of any use made of the resulting reports.

### **Description of Available Reports**

### **Create Reports**

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Web access developed in cooperation with the Statistical Laboratory at Iowa State University.  
<http://www.statlab.iastate.edu/soils/reportest>  
August 1, 2000

USDA-NRCS

NASIS Reports

Soil Survey Division

Lehigh County, Pennsylvania

Pr

Table Y.--Prime Farmland

(Only the soils considered prime farmland are listed. Urban or built-up areas of the not considered prime farmland. If a soil is prime farmland only under certain conditions are specified in parentheses after the soil name.)

Map symbol	Soil name
AfA	Allenwood silt loam, 0 to 3 percent slopes
AfB	Allenwood silt loam, 3 to 8 percent slopes
ArA	Arendtsville gravelly silt loam, 0 to 3 percent slopes
ArB	Arendtsville gravelly silt loam, 3 to 8 percent slopes
BfA	Bedington-berks complex, 0 to 3 percent slopes
BfB	Bedington-berks complex, 3 to 8 percent slopes
BmA	Birdsboro silt loam, 0 to 3 percent slopes
BmB	Birdsboro silt loam, 3 to 8 percent slopes
BuB	Buchanan gravelly loam, 3 to 8 percent slopes
CmA	Clarksburg silt loam, 0 to 3 percent slopes
CmB	Clarksburg silt loam, 3 to 8 percent slopes
CpA	Comly silt loam, 0 to 3 percent slopes
CpB	Comly silt loam, 3 to 8 percent slopes
DbA	Duffield silt loam, 0 to 3 percent slopes
DbB	Duffield silt loam, 3 to 8 percent slopes
EhB	Edgemont channery loam, 3 to 8 percent slopes
GeA	Gladstone gravelly silt loam, 0 to 3 percent slopes
GeB	Gladstone gravelly silt loam, 3 to 8 percent slopes
GnA	Glenville silt loam, 0 to 3 percent slopes
GnB	Glenville silt loam, 3 to 8 percent slopes
LaB	Laidig gravelly loam, 3 to 8 percent slopes
LmB	Lehigh channery silt loam, 3 to 8 percent slopes
Lv	Linden loam
Me	Middlebury silt loam
MgB	Monongahela silt loam, 3 to 8 percent slopes
MlB	Mount lucas silt loam, 3 to 8 percent slopes
MuB	Murrill gravelly loam, 3 to 8 percent slopes
NaB	Neshaminy silt loam, 3 to 8 percent slopes
PeB	Penn channery silt loam, 3 to 8 percent slopes
ReA	Readington silt loam, 0 to 3 percent slopes
WaA	Washington silt loam, 0 to 3 percent slopes
WaB	Washington silt loam, 3 to 8 percent slopes

## IMPORTANT FARMLANDS OF LEHIGH COUNTY, PENNSYLVANIA

The Department of Agriculture and the Soil Conservation Service are concerned about any action that tends to impair the productive capacity of American agriculture. The Nation needs to know the extent and location of the best land for producing food, feed, fiber, forage and oilseed crops; the land that has special qualities for growing specific high-value crops; and other important lands for producing crops.

It is SCS policy to make and keep current an inventory of prime farmland and unique farmland of the Nation. This inventory is being carried out in cooperation with other interested agencies at the national, state and local levels of government. The objective of the inventory is to identify the extent and location of the important rural lands needed to produce food, feed, fiber, forage and oilseed crops.

The Important Farmlands Map of Lehigh County, Pennsylvania, has been published by the SCS. This map displays three of the categories recognized in the national inventory. Definition of types of important farmlands are as follows.

### Definitions

#### Prime Farmland

Prime farmland is land best suited for producing food, feed, forage, fiber and oilseed crops, and also available for these uses (the land could be cropland, pastureland, rangeland, forest land, or other land but not builtup land or water). It has the soil quality, growing season and moisture supply needed to produce sustained high yields of crops economically when treated and managed, including water management, according to modern farming methods.

Prime farmland meets the following criteria:

1. The soils have an adequate moisture supply.
2. The soils have a suitable soil temperature regime. These are soils that, at a depth of 20 inches (50 cm), have a mean annual temperature higher than 32°F (0°C).
3. The soils have a pH between 4.5 and 8.4 in all horizons within a depth of 40 inches (1 meter) or in the root zone if the root zone is less than 40 inches deep. This range of pH is favorable for growing a wide variety of crops without adding large amounts of amendments.
4. The soils have no water table or a water table that is maintained at a sufficient depth during the cropping season to allow food, feed, fiber, forage and oilseed crops common to the area to be grown.



5. The soils lack excessive soluble salts that inhibit plant growth.
6. The soils are not flooded frequently during the growing season (less often than once in two years).
7. The soils do not have a serious erosion hazard.
8. The soils have a permeability rate of at least 0.06 inches (0.15 cm) per hour in the upper 20 inches (50 cm).
9. Less than 10 percent of the surface layer in these soils consists of rock fragments coarser than three inches (7.6 cm). These soils present no particular difficulty in cultivating with large equipment.

A list of soils that qualify as prime farmland in Lehigh County is enclosed with this report.

#### Unique Farmland

Unique farmland is land other than prime farmland that is used for the production of specific high-value food and fiber crops. It has the special combination of soil quality, location, growing season and moisture supply needed to produce sustained high quality and/or high yields of a specific crop when treated and managed according to modern farming methods. Examples of such crops are citrus, olives, cranberries, fruit and vegetables.

Unique farmland has the following characteristics:

1. It is used for a specific high-value food or fiber crop.
2. It has a moisture supply that is adequate for the specific crop. The supply is from stored moisture, precipitation or a developed irrigation system.
3. It combines favorable factors of soil quality, growing season, temperature, humidity, air drainage, elevation, aspect or other conditions such as nearness to market that favor the growth of a specific food or fiber crop.

The unique farmland in Lehigh County is in orchards.

#### Additional Farmland of Statewide Importance

This is land, in addition to prime and unique farmlands, is of statewide importance for the production of food, feed, fiber, forage and oilseed crops. Criteria for defining and delineating this land is determined by the appropriate State agency or agencies. In Pennsylvania, Capability Class II land and Capability Class III land that does not qualify as prime farmland has been designated as additional farmland of statewide importance.

Agriculture Handbook No. 210, "Land-Capability Classification," issued in September 1961 by the U. S. Government Printing Office, defines the eight capability classes. A capability class is assigned to each soil.

A list of soils that qualify as additional farmland of statewide importance in Lehigh County is enclosed with this report.

#### Additional Farmland of Local Importance

In some local areas, there is concern for certain additional farmlands for the production of food, feed, fiber, forage and oilseed crops even though these lands are not identified as having national or statewide importance. Where appropriate, these lands are to be identified by the local agency or agencies concerned.

Lehigh County chose not to recognize any land in this category.

#### General

A legend on the front of the Important Farmlands Map identifies different kinds of land and their acreage in the county. Areas not colored are other land. These areas do not fit any of the categories listed in the definitions and are not water or urban areas more than 10 acres in size.

The criteria for identification of prime farmland and additional farmland of statewide importance are entirely related to soil characteristics. They were set up to facilitate the identification and inventory of the state's most productive farmland in a reasonable time by using existing soil surveys.

Most of the prime farmland and much of the additional farmland of statewide importance is now used for crops; however, it could be in pasture, range, forest or other land uses and still qualify as prime farmland. Urban and builtup land and water are excluded. The rationale for this approach is that land not committed to irreversible uses may be available for cropping. Decisionmakers must be aware of the long-term implications of various land use options for the production of food, feed, etc., and the trade-offs involved. Actions that put high quality farmland in irreversible uses should be initiated only if these actions are clearly in the public interest.

This inventory does not constitute a designation of any land area to a specific land use. Such designations are the prerogative of responsible state and local officials.

Finally, it is important to emphasize that prime farmland is one of the most important resources of the Nation. This exceptional land can be farmed continuously or nearly continuously without degrading the environment. It will produce the most food, feed, etc., with the least amount of energy used. It responds exceptionally well to fertilizer and other

chemical applications with limited loss of residues by leaching or erosion. This land has the highest percentage of soils that can be minimum tilled. It is the most responsive to management and requires the least investment for maintaining productivity.

The inventories of prime and unique farmlands and other important farmlands are dynamic. New areas may be developed and others will be converted to irreversible uses. Thus, the inventories must be updated periodically to reflect any significant changes.

LIST OF SOIL MAPPING UNITS THAT QUALIFY AS PRIME FARMLAND

Lehigh County, Pennsylvania

<u>Manuscript Symbol</u>	<u>Mapping Unit Name</u>
BdA	Bedford silt loam, 0 to 3 percent slopes
BgB	Buchanan gravelly loam, 3 to 8 percent slopes
BgB2	Buchanan gravelly loam, 3 to 8 percent slopes, moderately eroded
CgA2	Chester gravelly silt loam, 0 to 3 percent slopes, moderately eroded
CgB	Chester gravelly silt loam, 3 to 8 percent slopes
CgB2	Chester gravelly silt loam, 3 to 8 percent slopes, moderately eroded
CmA	Comly silt loam, 0 to 3 percent slopes
*CmB	Comly silt loam, 3 to 8 percent slopes
*CmB2	Comly silt loam, 3 to 8 percent slopes, moderately eroded
DuA2	Duffield silt loam, 0 to 3 percent slopes, moderately eroded
DuB2	Duffield silt loam, 3 to 8 percent slopes, moderately eroded
DvA	Duffield silt loam, low clay variant, 0 to 3 percent slopes
DvA2	Duffield silt loam, low clay variant, 0 to 3 percent slopes, moderately eroded
DvB	Duffield silt loam, low clay variant, 3 to 8 percent slopes
DvB2	Duffield silt loam, low clay variant, 3 to 8 percent slopes, moderately eroded
EkA	Elk silt loam, 0 to 3 percent slopes
FgB2	Fleetwood gravelly loam, 3 to 8 percent slopes, moderately eroded
GhA	Glenville silt loam, 0 to 3 percent slopes
GhA2	Glenville silt loam, 0 to 3 percent slopes, moderately eroded
GhB	Glenville silt loam, 3 to 8 percent slopes
GhB2	Glenville silt loam, 3 to 8 percent slopes, moderately eroded
Hn	Huntington silt loam
LaB2	Laidig gravelly loam, 3 to 8 percent slopes, moderately eroded
Ln	Lindside silt loam
MlA	Monongahela silt loam, 0 to 3 percent slopes
MmB2	Montalto silt loam, 3 to 8 percent slopes, moderately eroded
MuB2	Murrill gravelly loam, 3 to 8 percent slopes, moderately eroded
NtA	Norton silt loam, 0 to 3 percent slopes
NtB2	Norton silt loam, 3 to 8 percent slopes, moderately eroded
PeB	Penn shaly silt loam, 3 to 8 percent slopes
PeB2	Penn shaly silt loam, 3 to 8 percent slopes, moderately eroded
Ph	Philo silt loam
RdA	Readington silt loam, 0 to 3 percent slopes
RyA	Ryder silt loam, 0 to 3 percent slopes
RyB2	Ryder silt loam, 3 to 8 percent slopes, moderately eroded
TrA	Trexler shaly silt loam, 0 to 3 percent slopes
TrB2	Trexler shaly silt loam, 3 to 8 percent slopes, moderately eroded
WcB2	Washington gravelly loam, coarse variant, 3 to 8 percent slopes, moderately eroded
WgA	Washington silt loam, 0 to 3 percent slopes
WgA2	Washington silt loam, 0 to 3 percent slopes, moderately eroded

Revised 8/80  
By CHL

Lehigh-2 (Prime)

WgB Washington silt loam, 3 to 8 percent slopes  
WgB2 Washington silt loam, 3 to 8 percent slopes, moderately eroded  
\*WcB2 Washington gravelly loam, coarse variant, 3 to 8 percent slopes,  
moderately eroded  
WhA Wheeling gravelly loam, 0 to 3 percent slopes  
WhB2 Wheeling gravelly loam, 3 to 8 percent slopes, moderately eroded

\*Added to the legend

LIST OF SOIL MAPPING UNITS THAT QUALIFY AS ADDITIONAL FARMLAND  
OF STATEWIDE IMPORTANCE

Lehigh County, Pennsylvania

<u>Manuscript Symbol</u>	<u>Mapping Unit Name</u>
Aw	Atkins silt loam
AxA	Atkins silt loam, local alluvium, 0 to 3 percent slopes
BdB	Bedford silt loam, 3 to 8 percent slopes
BdB2	Bedford silt loam, 3 to 8 percent slopes, moderately eroded
BeA	Bedford and Lawrence silt loams, 0 to 3 percent slopes
BeB	Bedford and Lawrence silt loams, 3 to 8 percent slopes
BfB2	Brandywine loam, 3 to 8 percent slopes, moderately eroded
BfC2	Brandywine loam, 8 to 15 percent slopes, moderately eroded
CgB3	Chester gravelly silt loam, 3 to 8 percent slopes, severely eroded
CgC	Chester gravelly silt loam, 8 to 15 percent slopes
CgC2	Chester gravelly silt loam, 8 to 15 percent slopes, moderately eroded
CmC2	Comly silt loam, 8 to 15 percent slopes, moderately eroded
DuC2	Duffield silt loam, 8 to 15 percent slopes, moderately eroded
FgC2	Fleetwood gravelly loam, 8 to 15 percent slopes, moderately eroded
GnC	Glenville silt loam, 8 to 15 percent slopes
GnC2	Glenville silt loam, 8 to 15 percent slopes, moderately eroded
KnB2	Klinesville shaly silt loam, 3 to 8 percent slopes, moderately eroded
Mh	Melvin silt loam
MkA	Melvin silt loam, local alluvium, 0 to 3 percent slopes
MkB	Melvin silt loam, local alluvium, 3 to 8 percent slopes
MI B2	Monongahela silt loam, 3 to 8 percent slopes, moderately eroded
MmC2	Montalto silt loam, 8 to 15 percent slopes, moderately eroded
MoB2	Montevallo channery silt loam, 3 to 8 percent slopes, moderately eroded
MuC2	Murrill gravelly loam, 8 to 15 percent slopes, moderately eroded
NtC2	Norton silt loam, 8 to 15 percent slopes, moderately eroded
PeC2	Penn shaly silt loam, 8 to 15 percent slopes, moderately eroded
RdB	Readington silt loam, 3 to 8 percent slopes
RdB2	Readington silt loam, 3 to 8 percent slopes, moderately eroded
RdC2	Readington silt loam, 8 to 15 percent slopes, moderately eroded
RyC2	Ryder silt loam, 8 to 15 percent slopes, moderately eroded
TrB3	Trexler shaly silt loam, 3 to 8 percent slopes, severely eroded
TrC2	Trexler shaly silt loam, 8 to 15 percent slopes, moderately eroded
TsA2	Trexler shaly silt loam, moderately shallow, 0 to 3 percent slopes, moderately eroded

Manuscript  
Symbol

Mapping Unit Name

TsB2 Trexler shaly silt loam, moderately shallow, 3 to 8 percent slopes, moderately eroded  
TsB3 Trexler shaly silt loam, moderately shallow, 3 to 8 percent slopes, severely eroded  
TsC2 Trexler shaly silt loam, moderately shallow, 8 to 15 percent slopes, moderately eroded  
WcC2 Washington gravelly loam, coarse variant, 8 to 15 percent slopes, moderately eroded  
WgC Washington silt loam, 8 to 15 percent slopes  
WgC2 Washington silt loam, 8 to 15 percent slopes, moderately eroded  
WhC2 Wheeling gravelly loam, 8 to 15 percent slopes, moderately eroded

Changed to prime farmland

CmB Comly silt loam, 3 to 8 percent slopes  
CmB2 Comly silt loam, 3 to 8 percent slopes, moderately eroded