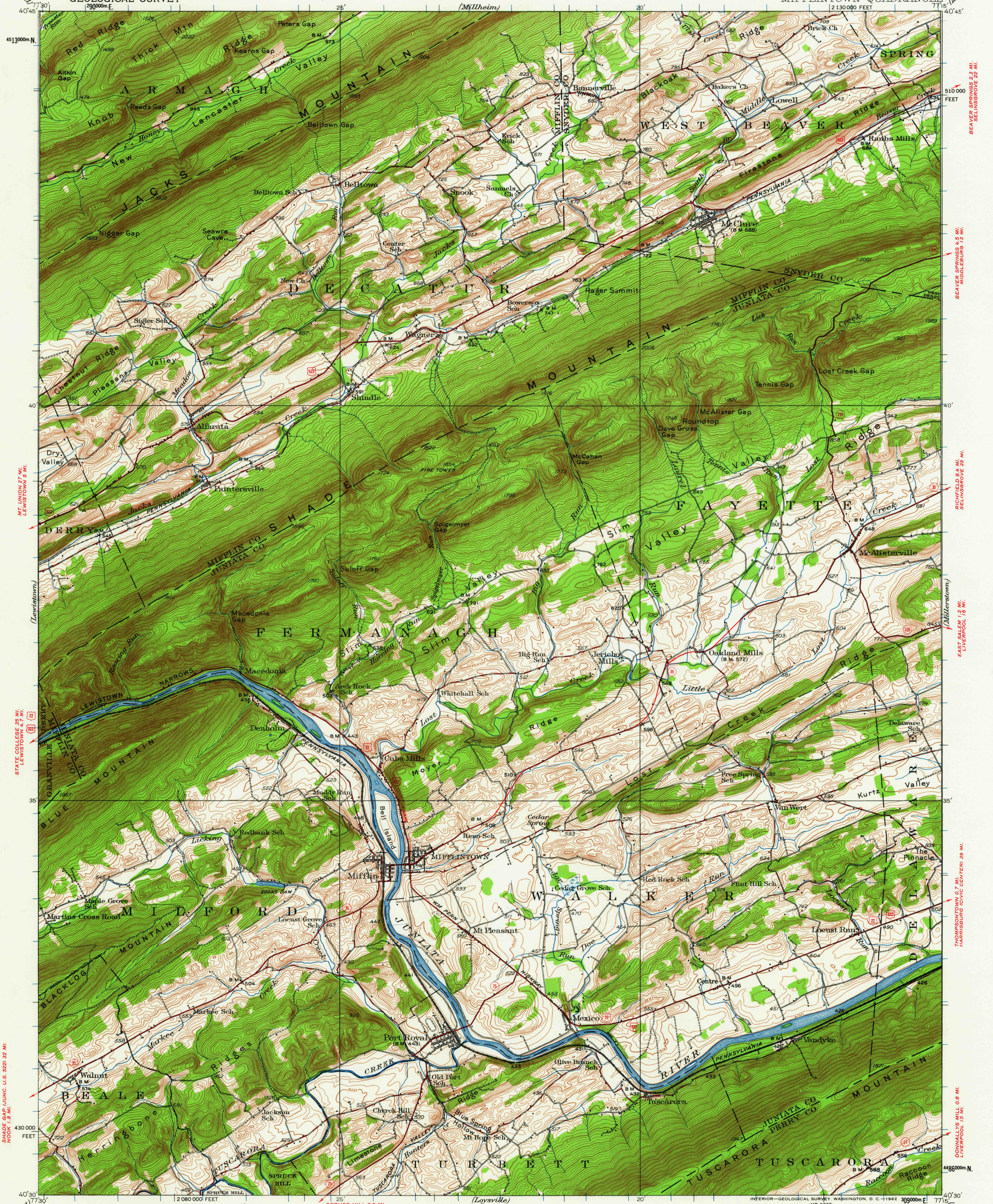
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

PENNSYLVANIA
MIFFLINTOWN QUADRANGLE


(Centre Hall)
(Millheim)
(Mifflinburg)
(Lewistown)
(Middlestown)
(Loysville)
(East Waterford)
(New Bloomfield)
77°30'
77°15'
40°45'
40°30'
40°
35'
25'
20'
290 000m.E.
2 130 000 FEET
2 080 000 FEET
451 3000m.N.
448 6000m.N.
510 000 FEET
430 000 FEET
Theater Run
Red Ridge
Thick Mtn
Peters Gap
Aitkin Gap
Kearns Gap
Ridge
Creek Valley
ARMAGH MOUNTAIN
Reeds Gap
Knob
Honey
New
Lancaster
Belltown Gap
JACKS
Nigger Gap
Seawra Cave
Belltown
Belltown Sch
Snook
Samuels Ch
Krick Sch
MIFFLIN CO
SNYDER CO
Bannerville
Creek
Ulsh
Brick Ch
SPRING
Blackoak
Bakers Ch
Middle
Lowell
WEST BEAVER
Beaver
Creek
Rambs Mills
Firestone
PENNSYLVANIA
South
McClure
(B M 688)
Center Sch
Jacks
Mattawana Run
New Ch
DECATUR
Rager Summit
Bowersox Sch
Wagner
Sigler Sch
Chestnut Ridge
Pleasant
Valley
Meadow
Shindle
Alfarata
Dry Valley
Paintersville
Jacks
PENNSYLVANIA
DERRY
MIFFLIN CO
JUNIATA CO
SHADE
MOUNTAIN
Spigelmyer Gap
Suloff Gap
Macedonia Gap
FERMANAGH
Roaring Run
Macedonia
NARROWS
LEWISTOWN
Arch Rock Sch
Whitehall Sch
Denholm
Cuba Mills
Moyer
Muddy Run Sch
Bell Island
Redbank Sch
Licking
Maple Grove Sch
Martins Cross Road
MILFORD
Locust Grove Sch
Markee Sch
Markee
Ridges
Walnut
BEALE
Herringbone
Jackson Sch
TUSCARORA
SPRUCE HILL
Limestone
Hunters
VALLEY
Church Hill Sch
Old Port Sch
Port Royal
(B M 443)
CREEK
Blue Spring
Hollow
Mt Hope Sch
TURBETT
Olive Branch Sch
Tuscarora
RIVER
Vandyke
Centre
Mexico
Locust Run
Raccoon Ridge
Cedar Spring
Reno Sch
MIFFLINTOWN
Mifflin
Cedar Grove Sch
Red Rock Sch
Flint Hill Sch
Mt Pleasant
WM PENN
HIGHWAY
Doe Run
Juniata
Tuscarora
Lick Run
Lost Creek Gap
Tennis Gap
McAlister Gap
Roundtop
Dave Gross Gap
McCahan Gap
Laurel
Tuscarora Valley
Lost Ridge
FAYETTE
McAlisterville
Oakland Mills
(B M 572)
Jericho Mills
Big Run Sch
Slim
Valley
Big
Run
Horning
Lost
Ridge
Creek
Little
Delaware Sch
Free Spring Sch
Kurtz
Van Wert
The Pinnacle
Dogwood
Ridge
Locust Run
Tuscarora
Mountain
Zooks Dam
Fire Tower
1854
1822
1798
1773
1746
1821
1943
1959
1921
1967
1916
2006
1904
1893
1877
1908
1983
1686
1791
1724
1976
1962
1942
1527
1528
1498
1474
1222
1904
1893
1877
1908
1983
1967
1916
2006
1959
1921
1943
1821
1746
1822
1854
1798
1773
1724
1791
1686
1962
1942
1527
1528
1498
1474
1222
973
945
823
754
692
671
627
725
693
796
652
674
657
645
672
748
760
682
709
795
659
667
643
614
634
749
722
783
747
665
685
623
627
651
687
624
692
534
591
568
555
621
668
570
545
638
691
791
857
762
655
641
627
620
582
603
604
562
598
546
709
581
512
503
479
538
567
552
522
510
608
599
538
533
526
508
503
492
543
442
511
470
464
457
441
522
453
496
431
433
426
432
518
517
556
588
502
490
504
426
451
555
558
583
563
469
573
529
522
530
513
581
563
Red
Ridge
Thick
Mtn
Aitkin
Gap
Reeds
Gap
Knob
Honey
New
Lancaster
Valley
Creek
Peters
Gap
Kearns
Gap
Ridge
Belltown
Gap
Nigger
Gap
Seawra
Cave
Belltown
Sch
Snook
Samuels
Ch
Krick
Sch
MIFFLIN
CO
SNYDER
CO
Bannerville
Creek
Ulsh
Brick
Ch
SPRING
Blackoak
Bakers
Ch
Middle
Lowell
WEST
BEAVER
Beaver
Creek
Rambs
Mills
Firestone
PENNSYLVANIA
South
McClure
(B M 688)
Center
Sch
Jacks
Mattawana
Run
New
Ch
DECATUR
Rager
Summit
Bowersox
Sch
Wagner
Sigler
Sch
Chestnut
Ridge
Pleasant
Valley
Meadow
Shindle
Alfarata
Dry
Valley
Paintersville
Jacks
PENNSYLVANIA
DERRY
MIFFLIN
CO
JUNIATA
CO
SHADE
MOUNTAIN
Spigelmyer
Gap
Suloff
Gap
Macedonia
Gap
FERMANAGH
Roaring
Run
Macedonia
NARROWS
LEWISTOWN
Arch
Rock
Sch
Whitehall
Sch
Denholm
Cuba
Mills
Moyer
Muddy
Run
Sch
Bell
Island
Redbank
Sch
Licking
Maple
Grove
Sch
Martins
Cross
Road
MILFORD
Locust
Grove
Sch
Markee
Sch
Markee
Ridges
Walnut
BEALE
Herringbone
Jackson
Sch
TUSCARORA
SPRUCE
HILL
Limestone
Hunters
VALLEY
Church
Hill
Sch
Old
Port
Sch
Port
Royal
(B M
443)
CREEK
Blue
Spring
Hollow
Mt
Hope
Sch
TURBETT
Olive
Branch
Sch
Tuscarora
RIVER
Vandyke
Centre
Mexico
Locust
Run
Raccoon
Ridge
Cedar
Spring
Reno
Sch
MIFFLINTOWN
Mifflin
Cedar
Grove
Sch
Red
Rock
Sch
Flint
Hill
Sch
Mt
Pleasant
WM
PENN
HIGHWAY
Doe
Run
Juniata
Tuscarora
Lick
Run
Lost
Creek
Gap
Tennis
Gap
McAlister
Gap
Roundtop
Dave
Gross
Gap
McCahan
Gap
Laurel
Tuscarora
Valley
Lost
Ridge
FAYETTE
McAlisterville
Oakland
Mills
(B M 572)
Jericho
Mills
Big
Run
Sch
Slim
Valley
Big
Run
Horning
Lost
Ridge
Creek
Little
Delaware
Sch
Free
Spring
Sch
Kurtz
Valley
Van
Wert
The
Pinnacle
Dogwood
Ridge
Locust
Run
Tuscarora
Mountain
Zooks
Dam
Fire
Tower
1854
1822
1798
1773
1746
1821
1943
1959
1921
1967
1916
2006
1904
1893
1877
1908
1983
1686
1791
1724
1976
1962
1942
1527
1528
1498
1474
1222
973
945
823
754
692
671
627
725
693
796
652
674
657
645
672
748
760
682
709
795
659
667
643
614
634
749
722
783
747
665
685
623
627
651
687
624
692
534
591
568
555
621
668
570
545
638
691
791
857
762
655
641
627
620
582
603
604
562
598
546
709
581
512
503
479
538
567
552
522
510
608
599
538
533
526
508
503
492
543
442
511
470
464
457
441
522
453
496
431
433
426
432
518
517
556
588
502
490
504
426
451
555
558
583
563
469
573
529
522
530
513
581
563
Raccoon
Ridge
Creek
Ridge
Beaver
Creek
Rambs Mills
Firestone
PENNSYLVANIA
South
McClure
(B M 688)
Center Sch
Jacks
Mattawana Run
New Ch
DECATUR
Rager Summit
Bowersox Sch
Wagner
Sigler Sch
Chestnut Ridge
Pleasant Valley
Meadow
Shindle
Alfarata
Dry Valley
Paintersville
Jacks
PENNSYLVANIA
DERRY
MIFFLIN CO
JUNIATA CO
SHADE MOUNTAIN
Spigelmyer Gap
Suloff Gap
Macedonia Gap
FERMANAGH
Roaring Run
Macedonia
NARROWS
LEWISTOWN
Arch Rock Sch
Whitehall Sch
Denholm
Cuba Mills
Moyer
Muddy Run Sch
Bell Island
Redbank Sch
Licking
Maple Grove Sch
Martins Cross Road
MILFORD
Locust Grove Sch
Markee Sch
Markee
Ridges
Walnut
BEALE
Herringbone
Jackson Sch
TUSCARORA
SPRUCE HILL
Limestone
Hunters
VALLEY
Church Hill Sch
Old Port Sch
Port Royal
(B M 443)
CREEK
Blue Spring
Hollow
Mt Hope Sch
TURBETT
Olive Branch Sch
Tuscarora
RIVER
Vandyke
Centre
Mexico
Locust Run
Raccoon Ridge
Cedar Spring
Reno Sch
MIFFLINTOWN
Mifflin
Cedar Grove Sch
Red Rock Sch
Flint Hill Sch
Mt Pleasant
WM PENN
HIGHWAY
Doe Run
Juniata
Tuscarora
Lick Run
Lost Creek Gap
Tennis Gap
McAlister Gap
Roundtop
Dave Gross Gap
McCahan Gap
Laurel
Tuscarora Valley
Lost Ridge
FAYETTE
McAlisterville
Oakland Mills
(B M 572)
Jericho Mills
Big Run Sch
Slim Valley
Big Run
Horning Run
Lost Ridge
Creek
Little
Delaware Sch
Free Spring Sch
Kurtz Valley
Van Wert
The Pinnacle
Dogwood Ridge
Locust Run
Tuscarora Mountain
Zooks Dam
Fire Tower
1854
1822
1798
1773
1746
1821
1943
1959
1921
1967
1916
2006
1904
1893
1877
1908
1983
1686
1791
1724
1976
1962
1942
1527
1528
1498
1474
1222
973
945
823
754
692
671
627
725
693
796
652
674
657
645
672
748
760
682
709
795
659
667
643
614
634
749
722
783
747
665
685
623
627
651
687
624
692
534
591
568
555
621
668
570
545
638
691
791
857
762
655
641
627
620
582
603
604
562
598
546
709
581
512
503
479
538
567
552
522
510
608
599
538
533
526
508
503
492
543
442
511
470
464
457
441
522
453
496
431
433
426
432
518
517
556
588
502
490
504
426
451
555
558
583
563
469
573
529
522
530
513
581
563
Raccoon Ridge
Creek
Ridge
Beaver