

US EPA ARCHIVE DOCUMENT

Western Allegheny Plateau (70) Field Notes:

Ecoregion Summary

Ecoregion LULC Change

The Western Allegheny Plateau is generally a stable region with pockets and pieces of land use and land cover change. Most of the change that we observed was moderate and associated with one of the following land uses or locations.

Hypothesized cropland decrease	Narrow valleys throughout the ecoregion	Low crop prices. National economies of scale for farm size increasing, but this is a region of small farms National economies of scale for machines, but this is a region of small fields
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Introduction

Accessibility seemed to be a necessary condition for land use dynamics in the Western Allegheny Plateau Ecoregion. Specifically access to urban areas, farmable soil, minerals, and harvestable timber.

Access to urban areas seemed to be correlated with more open land and less forest, larger exurban lots, and more exurban houses and subdivisions.

Accessibility to soil affected farming in two major ways. This is a region of hills and valleys. Cropland dominated the few areas that had broad valleys with deep soil, such as in southeastern Ohio. The proportion of cropland decreased and the proportion of pasture and forest increased in the more narrow valleys, and in the most narrow valleys cropland vanished. Farmers were also constrained in their access to soil by the short, steep slopes of the hills. Higher on the slopes soils became thin, and slopes became too steep to farm without major erosion. Most slopes were pasture or hay, and virtually all higher, steeper slopes were pasture only. Normally trees grew above the line where pastures were mowed, and we saw countless examples of farmers moving the mow line down slope to avoid the most dangerous steep areas. These unmowed strips and patches were quickly invaded by sprouts and then returned to forest. There were some areas where the hilltops were broad enough to farm, and the pattern reversed with roads on the ridgelines and forested hills dropping to narrow valleys.

This ecoregion is a major producer of coal, natural gas, oil, and some locations other minerals as well as limestone and clay. Mining is patchy, occurring only where there are accessible, economically worthwhile deposits. In some areas, where coal is near the surface, active strip mining has placed an additional constraint upon farming, especially in southeast Ohio where there are many strip mines located in flat to gently sloping areas that would also be good for agriculture.

Logging and other types of forest industry were locally important in areas where there was access to harvestable trees.

Hill and Valley LULC Pattern

Valley width varied across the region from the wide, Midwestern type farming areas in southeastern Ohio, to the more typical narrow valleys that were 100 to 400 yards wide, to extremely narrow valleys. Land use tended to vary with valley width. The wide northwest to southeast tending, parallel valleys of southeastern Ohio were occupied by larger scale corn and soybean farms with, pasture, and hay common. The more typical 100-400 yard wide valleys had corn with fewer soybeans and south of the Ohio in Kentucky tobacco. Hay fields and pasture common in these valleys. As valleys became even more narrow, the proportion of hay and pasture increased and the proportion of row crops decreased. In the narrow valleys, it was difficult and perhaps not economical to use large farm machinery. The result was either the absence of row crops or the use of small farm machinery. In the most narrow valleys, there were virtually no row crops. Pasture and forest were the most common land uses there. In areas with narrow valleys where an occasion side valley intersects, there is normally a larger flat area at the intersection of the two valleys. Because these intersections provide larger areas of flat land, they often have larger fields, clusters of houses, an occasional church, and road intersections.

Farming

The importance of agriculture varied from very important in southeast Ohio, to moderately important in parts of Kentucky and south of Pittsburgh, to marginally important north of Pittsburgh and parts of Kentucky and West Virginia, to virtually nonexistent in almost totally forested blocks that were mostly located in West Virginia. The greater the proportion of forest, the higher the proportion of farm land devoted to pasture and consequently less land was devoted to crops. With the exception of southeast Ohio's Midwestern type farms, the most common land covers associated with farming throughout the ecoregion were hay and pasture with steep hillsides covered by forest.

A significant land cover change that we observed throughout the region is the incremental conversion of pasture edges to forest. In this hilly ecoregion, a common hillside vegetation pattern is for the lower slope to be pasture with a distinct woods line on the upper slope. Many pastures, however, were being invaded by sprouts because farmers had ceased to mow. There was a general pattern to the forest invasion. Lower slopes often continued to be used for pasture with a distinct woods line on the upper slope. The tree line became indistinct when mowing ceased, because the boundary strip is quickly invaded by tree sprouts and shrubs, which then become brush and trees. It was common to see that the lower, more gentle slopes continued to be mowed, but the upper slope near the tree line was allowed to return to forest. The areas not mowed were nearly always the highest and steepest parts of the slope, while lower areas, with more gentle slopes continued to be mowed. In places two or more generations of sprout strips of different ages were apparent. The farmers are allowing the forest to return one patch or strip at a time. During the next 20 years, the invasive sprouts will become forest unless mowing is resumed. This pattern has

probably already increased the width of upper slope forest in many areas. We saw dozens of new roads to hilltops and suspect that some or all of these led to new pasture. If so, then significant parts of this ecoregion may have forest being converted to pasture, while the steep slopes that are difficult to mow and fence are allowed to return to forest.

Most farm units were small except in southeastern Ohio. Irrigation and industrial farming were insignificant. We saw few implement dealers and most farm machinery was both old and small. The farmers in this ecoregion are probably above the national average in age, dependent upon off the farm jobs, or both.

Small grains were significant north of Pittsburgh and were nonexistent or played a very minor role elsewhere. Tobacco was an important crop only in the Kentucky blocks and we did not see a single tobacco field in any other state. Weed fields were extremely common in the ecoregion. These did not seem to be associated with crops. They may have been CRP land, but CRP lands are supposed to be planted in an approved, perennial cover, such as native grass or trees.

The ecoregion had many pastures, but few cows. We suspect that in some blocks the cattle were grazing on hidden, hilltop pastures.

Hay fields and pastures will be difficult to separate from yards south of Pittsburgh where many lawns were 3-7 acres in size.

Most of our blocks were in deep rural areas or areas with small towns that were not growing quickly in this generally stable ecoregion. There were notable exceptions, especially near Pittsburgh, the only city in the ecoregion. Urban and exurban growth was nearly always related to the presence of a major highway or intersection of highways. Highways, however, seemed to have no impact in several rural blocks. Transportation may be a necessary, but not sufficient condition for urbanization.

Mining

Strip mining was a significant land cover in this coal producing region. Land covers associated with strip mines included active mining, haul roads, power plants, strip mines restored with grass, deciduous trees, and pines, as well as lakes associated with strip mine pits. Most of the mines were coal strip mines. Southern Ohio also has underground coal mines. We also observed large limestone quarries, a molybdenum mine southwest of Pittsburgh, a clay mine in Ohio, and a mystery mine in central Kentucky. Older coal strip mines seem to have naturally revegetated. They have a hardwood cover, an irregular surface, and are often punctuated by lakes that formed when pits filled with water. In Ohio, these are often recreation areas, and in Ohio and Pennsylvania are often wildlife management areas. Some strip mines have been recontoured and revegetated. Common covers for restored mines include grass and pines. Pennsylvania law requires that mines be restored to hardwoods, but we did not see an example of this. Sometimes the grass on restored mines is used for pasture or hay and other times it is not. When strip mines occurred near urban areas they were used for a diverse mixture of urban uses ranging from shopping malls to landfills.

The most common urban uses were associated with public facilities such as health centers, landfills, and fairgrounds.

We were able to observe mines in Pennsylvania and Ohio, but Kentucky and West Virginia coal mines were inaccessible.

Forests

The Western Allegheny Plateau is an area of hardwood forests with small stands of pine and other evergreen trees. The pines appeared to have been planted and the proportion of pine increased from north to south in the ecoregion. Mobile home manufacturers were important in northern Pennsylvania where the hardwoods industry is important. Hardwood tree harvesting was common throughout the region, but there were few signs of value added industry other than the northern Pennsylvania mobile home manufacturers. Estell Wood Products of Irvine, Kentucky, for example, made pallets, a very low value product.

Most of the trees that we saw were immature hardwoods with scattered evergreen groves and planted pines in some strip mines. We saw evidence of larger hardwoods on logging trucks. There were several instances of hardwood forest thinning but only about three times did we observe clear cutting. However, I suspect that large-scale tree removal has been common on the ridge tops of Kentucky and West Virginia. We observed dozens steep, new farm roads that went up forested hills. We also saw hilltops that had only a fringe of standing trees. However, we were only able to document hilltop forest conversion to grass twice, because the hilltops were inaccessible. It is possible that there has been large scale conversion of broad, forested hilltops to pasture and perhaps hay.

Settlement pattern

Urbanization and exurbanization were important processes near Pittsburgh, a city that has been declining in population, but its urbanized area has been expanding spatially.

Deindustrialization was significant in the towns and cities along the Ohio River and its industrial tributaries, especially the Allegheny and Monongahela Rivers. In some blocks, factories have closed and been dismantled and mines have been closed since 1970. The Pittsburgh area and Ohio River and some of its tributaries are part of the Frostbelt that suffered from a lack of industrial competitiveness during the 1980s and 1990s.

These areas have had stable or declining populations; families have suffered declining income, and outmigration became common. Some of these areas still do not have enough capital to maintain the current housing stock or infrastructure. Abandoned and obsolete industrial facilities were common as were empty lots where old industrial facilities had been demolished and removed. Empty storefronts were also common. In areas with narrow valleys where an occasional side valley intersects, there is normally a larger flat area at the intersection of the two valleys. These intersections provide a large flat area for farming, houses, and road intersections.

In places we found pockets of dense rural settlement in areas devoid of cities or even larger towns. Apparently people were unemployed, employed in the hidden economy, active in distant commuting, or participating in seasonal work away from home. There was some evidence for the latter two in Kentucky where only women were doing yard work. Other reasons for only women doing yard work include division of labor, broken families, and randomness of our observations.

The Ohio river was a cultural divide. Junky landscapes and dogs were more common south of the river. Also, south of the Ohio, in areas that appeared to have poor people, many of the people out and about in residential areas, which made photography more difficult. These poverty areas often had a high population density and were normally located in narrow valleys that had little if any farmland. The individuals in these poor areas seldom waved and never smiled.

Edited Block Summaries

Block 70-137 Summary: Delorme PA 71

Urbanized Pittsburgh.

Skipped block.

Block 70-99 Summary Delorme PA 85

The block is located just northeast of Pittsburgh

This was basically a densely settled rural block with small Frost Belt cities.

The south half was somewhat active with increases in the rural population

while the north half was still suffering in the aftermath of recent

deindustrialization. Our coverage was adequate with 11 waypoints.

This block near Pittsburgh seemed to be positively affected by its location.

The south half of the block had nicer houses and there were no signs of a

dependence upon manufacturing. The north half of the block was down and

out with Frost Belt depressed industry. The northern half of the block had a

series of old industrial string towns with older houses where maintenance

was being deferred. Deferred maintenance may indicate that they are owned

by the elderly or the poor. Stores and other commercial buildings were also

not well maintained. These small cities had large, empty fenced lots near

the Kiskiminetas River where industrial buildings had once provided jobs.

Today even the buildings are gone. The Kiskiminetas River flows north into

the Allegheny River north of Pittsburgh. Just outside of the north edge of

the block we finally viewed an industry that was still open.

Most of the block was rural with rural housing and small scale farming the

most common land uses. The minor farming in the block was generally

associated with pasture and some cows and some evidence that at one time

there had been more farming, but that even then farming was probably not

significant. Common farming land covers consisted of corn, hay, pasture,

and woods. Other rural LULCs consisted of rural residences, a public water

supply lake, and an old mine, which we were unable to see.

Block 70-26 Summary: Delorme PA 45

The block was located just east of Clarion, a college town of 6,500 that has a public university with 5,400 students.

This block was a mosaic of woods, farmland, and reclaimed coal mines.

Hay, small grains and corn fields were abundant. Oil and gas activities were

present and there was one active coal mine that we saw. Our coverage was

thorough with 20 waypoints.

Typical farming land covers consisted of small grains (wheat and oats

stubble), pasture, hay, corn, and soybeans. We also saw clover, abandoned

farm orchards with apple trees, and abandoned silos. In places the cropped

areas were in hillside strips (e.g. oats at top, grass in the middle, and corn at

the bottom (photo 27). We saw some evidence of tree encroachment onto

pastures.

There was an active mine that may have been practicing mountaintop

removal. There were several old mines both restored and unrestored. The

common restored coal mine vegetation here was trees, but there were also

hayfields on old mines (26). This was also an area of oil and natural gas

wells and a natural gas storage area near Truittsville. Natural gas storage areas inject cheap (usually summer) transported gas into geologic formations that have had gas removed and remove and sell it when wholesale prices are high (usually during the winter).

East of Clarion was a cullet processing center and more open land than other places except where there were abandoned mines. Stratanville, just east of Clarion had a mattress factory and a mobile home manufacturer. There was no noticeable exurban growth on the east side of Clarion and the buildings along H 322 had deferred maintenance.

Even with the presence of Clarion University this was a rural block oriented to mining and farming. The off-farm jobs that we were able to document probably paid little and this was reflected in the landscape, which did not have new rural houses.

Block 70-15 Summary: Delorme 45

Skipped Block.

Block 70-08 Summary: Delorme PA 44

This is an isolated block centered on Clarion, Pennsylvania. It is located at the border of the North Central Appalachians ecoregion.

The field coverage of this block was unsatisfactory. We did not drive around Clarion nor did we photograph any of the town or Clarion University. We entered and exited Clarion on Highway 322, the major east-west road of the area, and did not see signs of recent growth or prosperity, though the traffic west of town was heavy. According to the Delorme map, most of the recent growth should be on the southeast and southwest edges of town. Highway 68, which connects Clarion with Interstate 80 two miles to the south, may have had some activity. There was some commercial growth at the intersection of highways 66 and 322 three miles west of Clarion, but not a great deal. The intersection of 66 and Interstate 80 had no growth. Clarion advertised its Autumn Leaf Festival, but there is little evidence of large-scale tourism when looking at land use or land cover.

Just east of this block in 70-26 we saw a mobile home manufacturer, in this block we observed two additional ones (38). These manufacturers probably provide many local, low-wage jobs and may be a major consumer of local wood. Oddly we have not seen many mobile or modular homes in the area. This block has old oil wells, and some new wells as well as some poorly restored coal mines. Agriculture was limited in this block with some hay and small grain, but generally few crops. This block is definitely at the margin for farming. The forest was immature hardwoods. We did see some areas where the hardwoods had been thinned, perhaps for selective harvesting.

Rural housing is typically in open areas or at the edge of the forest rather than in the forest. This may reflect the age of the houses rather than a regional preference for living in open areas, since we did not see many new houses in this block.

Block 70-25 Summary: Delorme PA 44

There was not much activity in this block. We may not have done an effective job in this block; we stopped only four times for photographs. This was a heavily mined block, and we saw evidence of both reclaimed mines and an active mine. The agriculture in this block consisted of small grains, corn, hay, and pasture. Many of the pastures in this block were overgrazed. This appeared to be a common pattern in the Pennsylvania part of this ecoregion. Parts of the block were heavily forested. There were few rural houses and they had large lawns.

We took only 4 waypoints in this block.

Block 70-34 Summary: Delorme PA 44 & 58

Agriculture in this block consisted of hay and corn. Some of the hay was alfalfa.

We saw some oil and gas wells and several one-half acre areas where the earth had been leveled, perhaps as a prelude to drilling for oil or gas.

We took only 7 waypoints in this block.

Block 70-43 Summary: Delorme PA 57-58

We took only three waypoints in this block.

We have seen few parks today, but several hunting clubs. Recreation in northern Pennsylvania is more oriented to hunting and fishing than hiking and picnicking.

This block had some corn, small grain stubble, and hay. Some pastures were overgrazed. There were several new houses. Some of the hardwood forests had been thinned. Highway 68 had heavy traffic and the area seemed prosperous, but stable.

Block 70-373 Summary OH 53 & PA 56

Block 70-373 is on the Pennsylvania-Ohio border west of Beaver Falls, Pennsylvania and north of East Liverpool, Ohio. We crossed the Allegheny River on the way to this block. West of it, the countryside was much more open and reminded me of parts of Wisconsin. However, the block also looked much more wooded than the Delorme maps showed.

The residential pattern in this block was some new houses along the main roads and mobile homes on the back roads. This was the first concentration of rural mobile homes that we saw on the trip, but they were common in the rest of the blocks until we returned to exurban Pittsburgh, where there were fewer.

Most of the agriculture that we saw consisted of hay and pasture. Forestry was important with a sawmill in the block and logs stored in an old mine.

Mining was also important in this block. We saw unrestored strip mines, a restored strip mine, and an active strip mine.

Block 70-129 Summary: Delorme 52 & 53

Skipped Block.

Block 70-216 Summary: Delorme OH 61

Because this block appeared to be stable on the image, we drove through it rather than making a loop.

This was an agricultural block. There was no land use change other than the Kimble clay and limestone mine that appeared to be new. This mine is

representative of the clay and ceramics industry that is important in southeast Ohio. There was an Interstate 77 exit near the block, but the highway appears to have been little affected by the highway. We saw carriage signs, but did not see any Amish nor anyone else doing any farm work. Farmers seemed to concentrate on cattle, corn, and hay. We also saw some wheat and hogs. Gas wells and oil wells were scattered along the road. There was evidence that parts of the hardwood forest had been cleared in some places and thinned in others. A sign to a furniture maker provided some evidence of possible local wood use. This may have also been related to the Amish settlement. There were small areas of pine.

Block 70-236 Summary: Delorme OH 60-61

This block is southeast of Tuscarawas.

The block had no change except revegetating of recently mined land and the recently mined lands that we were unable to see from the road.

Forests consisted of deciduous trees with some pines that had been planted in coal mines. Some of the pines were only four feet tall. These new pines were the only evidence of recent land cover change that we observed.

Agriculture consisted of corn, soybeans, pasture, and hay.

The Conesville power plant produces over 2 million kilowatts of power a year and uses coal from the massive coal mine that dominates the block.

Not far from the power plant is AK (formerly ARMCO) steel facility.

Block 70-280 Summary: Delorme 60 & 70

This block is located just north of Zanesville, Ohio, which is located on the National Road, U.S. 40, and Interstate 70.

Agriculture consisted of soybeans, hay, and pasture, with one area of sweet corn. We saw evidence of pasture returning to trees. Oil, gas, and coal were significant in the area. We saw multiple oil wells and gas lines and were able to document a one-acre oil pad that was beginning to revegetate (93).

The Powelson Wildlife area appeared to be an old coal mine. Active exurban settlement and subdivisions became prominent landscape features as we moved south toward Zanesville. At the urban edge, we documented an airport, large-lot subdivision, golf course, and industrial park.

Block 70-301 Summary: OH 70

This block corners 70-280 and is located at the west edge of Zanesville.

Both U.S. 40 and I-70 pass through the block.

The block was moderately active with new rural housing growth. Otherwise it seemed stable.

Stable block except for new exurban low to moderate density housing.

Some of these are on large lots with up to five acres of mowed lawn.

Housing ranged from mobile to near mansion. Most rural nonfarm houses appeared to have been constructed within the last 30 years, and we found pockets of new houses and one under construction in a hay field (105). The density of houses was higher close to Zanesville. Some of the houses were mobile or modular.

Agriculture consisted of corn, soybeans, hay, and pasture. Oil was present in the block, but not as important as in 70-280.

Block 70-326 Summary: Delorme OH 71

Interstate 77 bisects this block and Wolf Run State Park is in the east-central part of the block.

This block had no LULC changes.

This was an area of old, unrestored coal mines covered by deciduous trees. Part of one mine had been recycled as Wolf Run State Park. The lake in the park is a strip pit, and the airport north of the may be on mine land, but we did not investigate it. The lake supports two small summer businesses, a drive-in and a bait shop.

There were several rural residences built within the last thirty years. One new house (107) illustrates how a single rural house with a new lake, large yard, thinned trees, or trees removed for pasture modifies an area much larger than the size of the house or household would indicate. The presence of I-77 seemed to have no impact on the block.

Agriculture consisted of corn, hay, and pasture.

Block 70-345 Summary: Delorme OH 71

Changes in this block were restricted to new pines planted in multiple locations in a strip mining areas. We are unclear about why planted pines are a common (but minor) part of mine reclamation, since the hardwood apparently do not need to be planted. Part of a reclaimed mine has been recycled into an American Electric Power park and recreational area, but we were unable to determine its age. American Electric Power has planted 50 million trees (pine?) and has 350 lakes and 380 campsites in this and one other similar park.

This was a forested block, perhaps because of the high proportion of the block that has been mined. There were some older house and some mobile homes. There was also evidence that this has been a longtime oil producing area and there was also some recent oil activity.

Block 70-381 Summary: Delorme 69

Skipped block.

Block 70-511 Summary: Delorme OH 80

This block is adjacent to Block 70-510.

Agriculture included corn and soybeans, with hay. We also saw a dairy barn that looked unused, but there were dairy heifers on the farm. This type of operation was common in the ecoregion. Do some past dairy farmers continue to raise dairy cattle to sell to operating dairies? This block had weedy meadows or fields of weeds. This type of field was common throughout the ecoregion.

There were a few mobile homes that have been placed within the past 30 years.

With only six waypoints and no driving loops our block coverage may have been inadequate.

Block 70-510 Summary: Delorme OH 79-80

This block is adjacent to Block 70-511.

This was an interesting block, but there were no changes except for a few new house.

The Meigs Mine # 2, an underground coal mine was in the block. We were able to photograph air shafts and conveyor belts associated with the mine. There were also some planted pines in mined areas. There were poverty pockets in this block. Toward the north side a large fruit orchard with apples, raspberries, and peaches, as well as asparagus.

Agriculture included oats, and pasture along with more weed fields.

Block 70-559 Summary: Delorme OH 78 & 85

This was a stable agricultural block. Land use change seemed to be limited to the patches of young pine. Terry said that this may be a clue to changes that took place 30 years ago. The proportion of pines seems to be increasing as we move south. There were some new mobile homes and some new houses in the hills. This block seemed to have a high proportion of mobile homes. Most narrow valleys are no longer cropped, perhaps because they are too small for large equipment and too small to be tilled economically. Hay is common in these valleys. In the larger valleys corn, soybeans, pasture, and weeds, were common. There were two truck farms in this block, one was Amish the other unknown.

This was a typical block in that the agricultural land cover narrow valleys was mostly hay with the row crops only in the wider valleys.

Block 70-687 Summary: Delorme KY 30

This block is located south of Portsmouth, Ohio and west northwest of the Ashland, Kentucky area.

This block had a dense Spersopolis pattern in the valleys and along the roads in the wider valleys.

During the last thirty years we estimated that the proportion of houses built on our sample roads were as follows: Cub Run 20%, Little White Oak 50%, and Highway 7 50%. This block is within commuting range of Portsmouth and Ashland, which might explain the high population density. Several previously forested areas had been cleared for pasture, but it was hard to estimate the size of these, because we could not see over the hill tops. There was little other change that we could see.

Agriculture included tobacco, corn, hay, and pasture. Sheep were also fairly common on some of the small valley farms. The image showed mined areas, but as we discovered, viewing mines in Kentucky and West Virginia was not as easy as it was in Pennsylvania or Ohio.

Note: We did not encounter any guard dog breeds in Pennsylvania. The first was a pack of 'killer dogs' was in 70-216 the first Tuesday block. Dogs have become increasingly common as we move South. There seems to be a correlation between the number of dogs and poverty. Also as we move south the number of guard dogs has increased.

Cub Run Road. This turned out to be a classic hollow with a narrow flood plain that grew more narrow as it snaked back into the hills. The flood plain was lined with houses. The feeling and appearance was one of remoteness, even though the population density was high. Many houses were poorly maintained and many yards and farmsteads were junky. The narrow floodplain did not offer enough soil for a decent living and some folks were

just scratching by. Other places appeared to be owned by folks who welcomed the opportunity escape to an isolated valley. The flood plain finally ended, but the string of houses continued up into the hills. This was a difficult block because there were people almost every time we wanted to take a photograph.

Little White Oak Road from top of valley to bottom. This valley seemed to have a totally different personality from Cub Run. It was a wider valley with more actual farming and with more land oriented activity, such as tobacco farming. Poverty was less evident. It did not seem to be as isolated and there were not as many homesteads that seemed to belong to folks trying to get away from society.

Block 70-666 Summary: Delorme OH 84 and KY 29

This block was on both sides of the Ohio River, but we visited only the larger portion on the Kentucky side. Vanceburg was in the block.

The block was a poor stable area. There were rural houses along the Ohio River flood plain and hollow roads. Some houses were constructed during the past 30 years and mobile homes put in during that time. The major land use change appeared to be forest harvesting in areas that we could not see, but we often saw ridge top fringe trees.

Agriculture was minor in the block. It consisted mostly of cattle and some tobacco. Weed fields and overgrazed pasture were also common. We saw some small log lots in Vanceburg. We did not visit the Ohio part of the block, and could not see it from the Kentucky side because of a forested levee on the Ohio River.

Vanceburg was stable or declining. The town seemed to have little prosperity. Nine West had a plant of some kind, but it was closed, though from appearances it had recently been open. Perhaps the plant was on summer vacation. Based upon the size of the parking lot, the plant probably employed no more than 20-40 persons.

Block 70-765 Summary: Delorme KY 39

This block is located in two ecoregions: the Allegheny Plateau and the Interior Plateau. It is located in the Daniel Boone National Forest about 20 miles east of Lexington, Kentucky.

Agriculture occupied the river and creek valleys. Common crops included tobacco, corn, and soybeans. Hay and pasture land was also common.

This block is in the Daniel Boone National Forest. We saw no sign of the national forest and little evidence of its existence. The Carrington Springs Golf Course was new and along with a church camp were some rural recreation land uses that might have been located in the block because of the National Forest. We spent too little time in this block to do more than a drive through on the main road. We may have missed evidence of the National Forest.

This block was located in both the Allegheny Plateau and the Interior Plateau. While we saw dramatic evidence of the ecoregion boundary driving to this block, we did not see evidence in the block.

Block 70-798 Summary: Delorme KY 53

Irvine, the major town in this block, is located about 21 miles east of Richmond, a town of 21,000, with the Blue Grass Army Depot located between the two towns.

Land use changes included an unknown mine at the northwest side of Irvine and a potential new quarry northeast of town. The town gave mixed signals. The new apartments on the north end of town indicated that there is a shortage of housing or that the town is growing. Yet there were some empty store fronts and the massive rail terminal showed no signs of activity. The Carhart plant was new and was located on an old mine.

The mine was partially reclaimed and may still be open on its northern and/or western ends. A sign indicated that owner was Kentucky Processing. An internet search found Central Kentucky Processing (perhaps the same company), which provides the following services: Plating: Electroless, Black Oxide, Zinc, Nickel, Phosphate, Passivate, Deburring, Cleaning Heat Treating: Austempering, Carburizing, Carbonitriding, Vacuum, Induction, Through Hardening, Tempering, Annealing, Normalizing, Neutral Salt Hardening.

Agriculture included soybeans, corn, and hay. There may have been more, but we concentrated our efforts at the mine and in Irvine. East of town were two wood products business. While I was photographing Estel Wood Products a man drove out of the business and asked "Can I help you?" He then asked "You just taken pictures? You're not from the EPA are you?" Highway 52/213 northeast of town had many new houses and strip businesses. There was also kudzu along the road. We saw kudzu only a few times in this ecoregion. The Tipton Quarry (191) may have been new (it was not on the MRLC image or interpretation). From the size of the employee parking lot, it may have been a large quarry, but we could not see beyond the entrance.

Block 70-770 Summary: Delorme KY 41

This was a strange block. There were few roads and evidence of activity on hill tops where we could not see. These activities could have been related to mining or lumbering. We did see one lumbered hill and a road to the hill top that may have been a log road or skid track. There were some new houses.

Agriculture included corn, tobacco, hay, and weedy fields. There were some pine trees, and indirect evidence of an old mine that is now closed and revegetated. We also saw oil and gas wells.

This block probably deserved more time.

Block 70-655 Summary: Delorme OH 86 & WV 41-42

This block was in Ohio and West Virginia. We visited the Ohio portion, which is located about 10 miles north of Huntington, West Virginia.

The rural population was very dense in portions of this block. Agricultural land covers included corn, hay, weeds, tobacco, pasture, eroded pasture, sprouts invading pasture, and overgrazed pasture.

We saw a portable saw mill that had been recently installed and was in operation. In a different part of the block we saw a forest that had been

thinned and just outside of the block, I had the following conversation. We had stopped in Miller at a convenience store/bait shop. The store was located in a failed restaurant; the back room on the way to the restroom had a full kitchen in stainless steel that was not being used. A man saw our Delorme atlases as he was getting into his pickup. He said, "You guys buying lumber with those topographicals?"

The corridor along the Ohio river had small towns and houses that ranged from old to new. We also observed a barge loading or unloading facility being dismantled. This was symbolic of the land use changes in the industrial heartland that go along with the deindustrialization that has occurred during the past 30 years.

Block 70-576 Summary: Delorme WV 35 and 45

Valleys had virtually no land use change. They were dominated by hay, grass, and older farmsteads. Hill slope pastures had changed, with some of the upper slopes near the trees reverting to forest. Hill tops were not visible, but we saw small roads going up slope. These roads normally appeared to be recently constructed. Were these roads for lumbering or are the hilltops being converted to pasture, or both? If they are becoming pasture, are the trees bulldozed off, or is the forest first harvested? The only one that we saw had been converted to grass also had a new house that appeared to be a weekend house (see slide 226).

This area seemed to have resurgence in oil and gas with evidence that there had been older oil and gas exploitation as well. Agriculture consisted of hay and pasture, with some of the pastures returning to trees on their upper fringes.

Block 70-578 Summary: Delorme We 45 & 35

I am not satisfied with our coverage of this largely forested block. We did not go into the Burnsville Land Wildlife Management Area, which was a dominant part of the block. It included hunting, camping, the Burnsville Lake Project, a chapel, Turnpike Trail, and Bulltown Historic District. Nor did we drive the side roads that went at the park's edge, where there may have been residential development associated with the area. The new mobile home (Photo 234) provides a hint that the park may be attracting some new growth. The land use change that we saw was limited to a few new houses, some of which had large lawns. Additional changes include pasture returning to trees, and new roads that went up into the forested hill tops and that may be associated with lumber or new pastures. Agriculture was limited to pastures. There were also some gas wells.

Block 70-500 Summary: Delorme WV 35

This block is just west of Buckhannon, West Virginia. The block was in two ecoregions, the Western Allegheny Plateau and the Central Appalachians. The ecoregion boundary was not distinct noticeable here, but we were not looking at for in this particular block.

The west edge of town was dynamic, but fell just outside the block.

There were a significant number of new houses 1) near Buckhannon, and 2) in scattered pockets. The block also had several new roads to hilltops. Our last stop (247-46) showed that these may be hilltop pastures. Mining may have made a significant and use change, but we could not get to a mine without trespassing. Oil and gas was significant as was gas transmission and related gas activities. This block had more agriculture than the last block (70-578). Agricultural land covers included corn, hay, and pasture. Wood products were significant. There were pockets of high rural density.

Block 70-496 Summary: Delorme WE 35

There were too few roads to get adequate coverage of this block. No visible land use changes. Few new houses. Modest to poor housing. The poor housing had junk strewn about. Oil seemed to be significant. There were no crops. There was evidence of change on the hill tops, but the roads were in the valley. Sprout encroachment was significant, so this block is probably becoming more wooded. Agriculture consisted of pasture, eroded pasture, hay and one back-to-the-land farm.

Block 70-419 Summary: Delorme WV 24

This block is located northwest of West Union. Gas is very important. There were many gas wells, compressor stations, etc. The image shows many new gas wells, but they were inaccessible. There were some new houses near West Union and evidence that wood is important. We did this block late in the day, when it was beginning to rain, and the cloud cover made photography difficult. Consequently, we did not spend much time in it.

Block 70-208 Summary: Delorme PA 71

This block includes Denora, site of the largest pollution disaster in the U.S., where an inversion trapped air pollution and killed 50 persons. The Monongahela River and I-70 are located in this block. The block is also located within a string of old mining and industrial cities along the Monogahela River south of Pittsburgh. The eastern part of the block is located in the Central Appalachians. This was a dynamic block outside the urban areas. We did not have time to explore the older urbanized zones. There were pockets of exurban growth from one house to subdivisions. Two vineyards that appeared on the Delorme map were gone. There was no visible evidence of one and the other had two rows of grapes. There was a restored mine and a new landfill. This was a more urban block with resulting larger houses and larger lots than we had been seeing. There were few mobile homes in the area. The number of small, abandoned barns indicated that this area had once had more farms than it does today. The agricultural land was mostly corn, hay, and pasture. This block had an open feeling with much open space and a much lower proportion of trees than any other blocks except for the broad stream valleys of southeastern Ohio.

Agricultural covers consisted of corn, small grains, hay, and pasture. An abandoned mine has now been restored (277) and an new land fill has been built, perhaps within part of the old mine.

Block 70-204 Summary: Delorme PA 70

Washington, Pennsylvania was in the center of this block, which is located about half way between Wheeling, WV and Pittsburgh. I-70, I-79 and U.S. 40 intersect here. We devoted most of our time to the rural and urbanizing parts of the block.

Mixed LULC change. Parts of the block were stable, parts were active, and parts have recently undergone massive transformation. Hewitt Avenue by the fairgrounds was particularly dynamic with public facilities going into what we think was an old mine. This block had much new housing from mobile homes to large houses. Some of the rural houses had enormous lots. We saw both residential and commercial construction. We also observed an old mine being recycled into a shopping center at the intersection of I-70 and U.S. 40.

Agricultural covers consisted of corn, hay, and pasture.

Block 70-158 Summary: Delorme 70

This block is on the urbanizing edge of Pittsburgh. I-79 goes through the block and Bridgeville, which Delorme shows as already urbanized, is in the block.

The north half of the block is dynamic and undergoing rapid urbanization. We observed entire subdivisions under construction as well as a new high school being built. This area was historically an agricultural area with the rural parts of the block still being farmed, but it is in the process of becoming Pittsburgh.

We did not spend enough time in the block to observe the rural and agricultural parts. Instead we focused on recent activity in the north half. The agricultural covers that we observed included corn and pasture with one field of cabbages.

Block 70-156 Summary: Delorme PA 79

This block was generally stable except for large areas of recent and ongoing mine reclamation. We saw no evidence of current coal mining, but the Langeloth Molybdenum Climax mine is open.

We did not have enough time to see all of this block. For example we did not go to Langeloth, but saw the mine smokestack and tailings piles from the road.

Agricultural covers consisted of mostly of hay. The area was heavily mined and most of the old mining has been invaded by deciduous trees.

Western Allegheny Plateau Field Trip Notes: Complete version

Introduction

Christmas tree farms south of Sardis.

Lush countryside.

Monday August 13, 2001

Sunday night in Monroeville east of Pittsburgh

70-137 PA 71

Block 70137 Summary: Delorme PA 71

Urbanized Pittsburgh.

Skipped block.

70-99 PA 58:

Near Pittsburgh

1 40.31.923 79.36.952 Wooded hill; Woods; Road;

Corn, pasture, hay.

Equine Center

2 40.30.817 79.33.322 Beaver Run public water supply (reservoir) owned by the county.

Beaver Run road had older houses, but many appeared to have been constructed 15-30 years ago. Large lots and acreages.

3 40.31.375 79.34.453 Meadow or hay on ridge top. House

Road on ridge with strip of cleared land that followed the ridge. Looks like this was small farm country at one time.

4 40.31.322 79.34.668 Woods with barn and pasture; Barn and barn lot. The barn had hay in it.

Cows.

5 40.31.305 79.36.354 Corn field; Composit Inc.

6 40.31.936 79.36.843 Composite (connector stamping); House.

7 Did not take.

8 40.31.789 79.34.824 House; Cleared land.

9 40.31.982 79.34.198 Rubble from cleared mine. Old coal mine; could not get a good view. Riggle Trucking.

Regular pattern of dense rural settlement along roads.

10 40.31.924 79.35.782 Concrete lawn ornaments. North Washington crossroads.

Washington TWP had a large fire station with three large fire trucks.

Townships are important here. The rural density is high here.

Small pile of logs in a person's yard. Methodist Church camp. Limestone company. Series of string towns growing together in Kiskiminetas River valley.

Mostly depressed industrial towns. There were fences that once enclosed buildings, but the buildings were gone. Older houses that looked to be owned by poor people or that had deferred maintenance.

11 40.35.806 79.33.479 Houses on floodplains with a higher level of houses across the river and dozens of feet higher on the bluff.

Closed plant in N Vandergrift.

Block 70-99 Summary Delorme PA 85

This was basically a densely settled rural block with small Frost Belt cities. The south half was somewhat active with increases in the rural population while the north half was still suffering in the aftermath of recent deindustrialization. Our coverage was adequate with 11 waypoints.

The block is located just northeast of Pittsburgh

This block near Pittsburgh seemed to be positively affected by its location.

The south half of the block had nicer houses and there were no signs of a dependence upon manufacturing. The north half of the block was down and out with Frost Belt depressed industry. The northern half of the block had a series of old industrial string towns with older houses housed where maintenance was being deferred. Deferred maintenance may indicate that they are owned by the elderly or the poor. Stores and other commercial buildings were also not well maintained. These small cities had large, empty fenced lots near the Kiskiminetas River where industrial buildings had once provided jobs. Today even the buildings were gone. These towns were on the Kiskiminetas River which flows north into the Allegheny River north of Pittsburgh. Just outside of the north edge of the block we finally view an industry that was still open.

Most of the block was rural with rural housing and small scale farming the most common land uses. The minor farming in the block was generally associated with pasture and some cows and some evidence that at one time there had been more farming, but that even then farming was probably not significant. Common farming land covers consisted of corn, hay, pasture, and woods. Other rural LULCs consisted of rural residences, a public water supply lake, and an old mine, which we were unable to see.

Out of Block

New small industrial park.

Leechburg had more closed stores.

Ludlum Steel Corp. sign, but we did not go down the road to see if it was open.

Hay and corn in the open areas.

12 40.40.732 79.34.997 Pickle farm. There was much corn around the pickle farm. They grew sweet corn to sell.

New road into forest but no clue about its purpose.

Hay. Hydroplant. Small natural gas pumping station. Machinery and fabricating small businesses. Corn and hay. Peach Festival sign.

Ford City. Closed mill (steel?). New highway construction about 4 miles east of Ford City. Hay. Abandoned farmland. Woods. Pasture. Old mining. Gas field. Corn. Pine. Closed dairy just east of Orchardville. Hardwood logs by roadside. Llamas for sale. Core. Area of flooding.

70-26 PA 45

East of New Bethlehem.

Houses along road. RR by Red Bank Creek. Hay. Highway 536 to Mayport.

13 41.02.327 79.15.424 Oil. Wheat stubble, pasture, tree line.

14 41.02.080 79.15.057 New plant. Master ? Inc. Started in 1987.

15 41.01.917 79.14.065 Hay with reclaimed land in background. Active mine. Barn and hay.

- 16 41.01.779 79.14.268 New strip mine.
Signs of natural gas. Corn, hay, mobile homes, and much more corn.
- 17 41.01.356 79.13.177 Soybeans, soybeans, oats, corn
Reclaimed mine with erosion. Old farm.
- 18 41.01.274 79.12.129 Dairy with manure. Reclaimed mine-vegetation.
Restoration line on hill.
Evergreen trees. Gas. Oil. Oil.
Lots of oil on road to Truittsville.
- 19 41.04.164 79.15.987 Old mine. Trees growing on it.
Hay. Small grain. Trees retaking pasture. Hay land with one field returning to forest
- 20 41.04.394 79.16.854 Truittsville natural gas storage. Cemetery mixed with gas lines.
Small fields. Small grains. New rural house. Much grass and hay without fences.
P. Pumptown Road
P: Mailbox
- 21 41.04.004 79.17.756 Reclamation. Trees with thin subsurface soil used.
One strip of sunflowers. Saw no more.
This block was a mosaic of woods and reclaimed coal mines. Hay and small grain and corn fields were abundant. Oil and gas activities with one active coal mine that we saw.
- 22 41.05.005 79.17.929 Reclaimed mine..
- 23 ??
- 24 70.15.??? Old farm with apple trees and an abandoned silo.
New road.
- 25 41.05.802 79.16.250 New oil well.
Clover field. Large hay fields. Restored mines everywhere.
- 26 41.06.914 79.16.435 Hay field on old coalmine. Old cable at old entrance is one clue that this used to be a coal mine.
Higher percentage of hay in this block and less corn. Maybe because of the great proportion of land here that is restored coal land. Oats and corn.
- 27 41.07.654 79.16.354 Cropped strips with oats at top, grass in middle, and corn at bottom.
- 28 41.08.086 79.15.492 Limestone Township transportation barn.
- 29 41.09.935 79.13.503 Oil and gas well in old coal mine. New road (probably to new gas wells). Texas Keystone Inc. gas.
- 30 41.10.198 79.13.376 Texas Keystone natural gas facilities.
- 31 41.10.474 79.13.411 Land damaged, perhaps from contaminated water from drilling for oil. Abandoned coal mine. We saw several nonrestored mines in this area.
Toward Clarion we saw the Pennsylvania Cullet Processing Center. What is cullet? (broken or refuse glass, usually added to new material to facilitate melting in making glass) Alone 322 East of Clarion there was more open land and small grains and hay except where abandoned mines prevented them.
- 32 41.11.041 79.14.977 Mail Pouch barn.

Clarion limestone school. Immature trees. Some pines.

33 41.11.811 79.17.917 Hitchcock Lumber.

In Strattanville. Mobile home manufacturer and Sealy mattress factory.

Down and out motel/apartments. No new houses on the east side of Clarion.

Closed businesses. sleepy on the east side. We did not drive around Clarion or get a photo of the university.

Block 70-26 Summary: Delorme PA 45

This block was a mosaic of woods, farmland, and reclaimed coal mines.

Hay and small grain and corn fields were abundant. Oil and gas activities with one active coal mine that we saw. Our coverage was thorough with 20 waypoints.

Typical farming land covers consisted of small grains (wheat and oats stubble), pasture, hay, corn, and soybeans. We also saw clover, abandoned farm orchards with apple trees, and abandoned silos. In places the cropped areas were in hillside strips (e.g. oats at top, grass in the middle, and corn at the bottom (photo 27). We saw some evidence of tree encroachment onto pastures.

There was an active mine that may have been practicing mountaintop removal. There were several old mines both restored and unrestored. The common restored coal mine vegetation here was trees, but there were also hayfields on old mines (26). This was also an area of oil and natural gas wells and a natural gas storage area near Truittsville. Natural gas storage areas inject cheap (usually summer) transported gas into geologic formations that have had gas removed and remove and sell it when wholesale prices are high (usually during the winter).

The urban landscape consisted of Clarion, a college town of 6,500 that has a public university with 5,400 students. East of Clarion was a cullet processing center and more open land than other places except where there were abandoned mines. Strattanville, just east of Clarion had a mattress factory and a mobile home manufacturer. There was no noticeable exurban growth on the east side of Clarion and the buildings along H 322 had differed maintenance.

Even with the presence of Clarion University this was a rural block oriented to mining and farming. The off-farm jobs that were able to document probably paid little and this was reflected in the landscape, which did not have new rural houses.

70-15 PA 45

Block 70-15 Summary: Delorme 45

Skipped Block.

70-08 PA 44. Clarion town and university

No Clarion University photos.

Sign about the Autumn Leaf Festival. County seat.

322 W out of Clarion. Nothing new on the west side. Well kept, but apparently not growing.

Marianne. Mobile home sales are, but we have seen few lived in so far.

66 North. Heavy traffic between Clarion and Marianne. Small grain stubble. A couple of new buildings in Marianne and on the outskirts.

34 41.14.819 79.24.075 Restored mine.

Astro Homes. Mobile home manufacturer. Forested area with immature trees.

Hay land. Double modular. Thinned hardwoods. Hay, weeds, and small grains stubble.

35 41.17.512 79.25.556 Old oil well. Stubble. House. Reclaimed—land that had subsurface soils lying on the surface.

Some houses were in the woods, but edge of woods and in the open were more common. Question: Are older houses more likely to be in the open and new

houses more common (or more common than old houses) to be in the woods?.

Tiny, very old oil pumpers not used. New house in shape of barn The builder was using local trees for something because he had a pile of logs in the yard, but perhaps they were to sell to pay for the new house. Few crops.

36 41.16.122 79.26.965 Abandoned barn with trees coming up in the pasture.

Hay

37 41.15.581 79.27.499 Old oil drilling rig in a pasture.

322 & 66 intersection seemed to have the Clarion new growth. There was not a great deal.

38 41.14.007 79.25.776. Colony mobile home manufacturing near 322 & 66.

This is the third mobile home manufacturer that we have seen today (first day of trip), yet we have not seen many people living in one. This may be a way to use local wood and local surplus skilled workers.

Concrete place. Cleared trees behind it; purpose undiscernable. Feed store.

Weed fields. Logging and wood implement store. Trailer manufacturer. Little growth between 322 & I-80 except at the 322 & 66 intersection. Nothing at I-80.

Old mines along I-80. Oil. Strip of houses. Nursery. Corn. Reclaimed coal.

This block was heavily forested.

Block 70-08 Summary: Delorme PA 44

This is an isolated block centered on Clarion, Pennsylvania. It is located at the border of the North Central Appalachians ecoregion.

The field coverage of this block was unsatisfactory. We did not drive around Clarion nor did we photograph any photographs of the town or Clarion University. We entered and exited Clarion on Highway 322, the major east-west road of the area, and did not see signs of recent growth or prosperity, though the traffic west of town was heavy. We did not drive around Clarion. According to the Delorme map, most of the recent growth should be on the southeast and southwest edges of town. Highway 68, which connects Clarion with Interstate 80 two miles to the south, may have had some activity. There was some commercial growth at the intersection of highways 66 and 322 three miles west of Clarion, but not a great deal. The intersection of 66 and Interstate 80 had no growth. Clarion advertised its Autumn Leaf Festival, but there is little evidence of large-scale tourism when looking at land use or land cover.

Just east of this block in 70-26 we saw a mobile home manufacturer, in this block we observed two additional ones (38). These manufacturers probably

provide many local, low-wage jobs and may be a major consumer of local wood. Oddly we have not seen many mobile or modular homes in the area. This block has old oil wells, and some new wells as well as some poorly restored coal mines. Agriculture was limited in this block with some hay and small grain, but generally few crops. This block is definitely at the margin for farming. The forest was immature hardwoods. We did see some areas where the hardwoods had been thinned, perhaps for selective harvesting.

Rural housing is typically in open areas or at the edge of the forest rather than in the forest. This may reflect the age of the houses, since rather than a regional preference for living in open areas, since we did not see many new houses in this block.

We took only 5 waypoints in this block.

70-25 PA 44

Hay. Reclaimed mine. Active mine. Some land throughout the day appeared to be reclaimed mines that the Delorme showed as nondisturbed. If mines were reclaimed before the data was gathered then the map would not show disturbed. Tom. Do we have a map of mining and mined?

39 41.05.645 79.23.404 Active mine. Unknown abandoned building in trees. Small grain stubble. Corn. Small barns. Pasture.

40 41.04.377 79.22.343 Corn.

Packing Company sign. Hay. and corn. Alfalfa. Hay.

41 41.02.487 79.22.570 Tree lined road. Mobile home.

Large yards. Few new houses or new activity of any kind.

Fairly heavily forested. Corn. Overgrazed pasture.

Overgrazed pastures were common on Monday.

42 41.01.874 79.24.520 Overview of landscape mosaic. Corn strip. Road and houses.

Block 70-25 Summary: Delorme PA 44

There was not much activity in this block. We may not have done an effective job in this block; we stopped only four times for photographs. This was a heavily mined block, and we saw evidence of both reclaimed mines and an active mine. The agriculture in this block consisted of small grains, corn, hay, and pasture. Many of the pastures in this block were overgrazed. This appeared to be a common pattern in the Pennsylvania part of this ecoregion. Parts of the block were heavily forested. There were few rural houses and they had large lawns.

We took only 4 waypoints in this block.

70-34 PA 44 & 58

Hay

43 41.00.928 79.27.327 Abandoned Chopstone upright silos (similar to Harvestore)

Corn. Rough and wooded near the river. Pines.

We have seen hemlock and what appeared to be blue spruce. Pine has been occasionally intermingled on and off all day. We have not seen mature trees.

Typical is diameter from four inches to 10 inches. We have seen a few large logs at mills, but they always seem to be old logs salvaged from someplace.

44 41.01.484 79.29.690 House and large lots. House in open area.

Alfalfa.

45 41.01.526 79.29.375 Rimersburg Rod and Gun Club. Alfalfa and hay bales under trees at field edge. We saw at least three rod and gun clubs on Monday but few if any deer blinds.

46 41.01.337 79.29.545 Old stone house.

We have not seen oil or gas in awhile.

47 40.59.748 79.29.119 Red Bank Creek.

Corn. Older houses. Not much happening. Hay. Dense rural settlement with few towns all day.

48 40.58.126 79.28.256 Oil or gas drills. Overview of landscape. Corn on hill.

49 40.57.732 79.28.198 State transport barn with gravel.

Few newer (last 30 years) houses. One-half acre earth leveling in places. Is this a prelude to drilling.

Block 70-34 Summary: Delorme PA 44 & 58

Agriculture in this block consisted of hay and corn. Some of the hay was alfalfa.

We saw some oil and gas wells and several one-half acre areas where the earth had been leveled, perhaps as a prelude to drilling for oil or gas.

We took only 7 waypoints in this block.

OUT of Block

50 40.56.041 79.27.647 Power plant.

51 40.54.789 79.27.580. Company houses with power plant. The factory buildings behind the houses has been abandoned for many years.

West of the Allegheny the land seemed very different. It appeared to be open with much more farming than we had seen along H 422.

Block 70-43 PA

Hay. Old oil pump. Hunting club. New house. Mobile homes. Housing strip. Corn. Old oil machinery.. Corn. Small grain stubble. Immature forest. New houses.

On Monday we saw both wheat and oats, but mostly they had been harvested, so we do not know which was most prevalent.

52 40.54.261 79.44.719 New House. Several new houses.

53 40.56.43? 79.44.484 Corn and small grains. Hay and corn. House.

We have seen few parks (Bev). Old oil structure. Thinned hardwood forest.

Weed fields. Heavy traffic on H 68. Prosperity, but not much new.

Overgrazed pasture.

54. Pasture and barn. Overview. Bev and Terry.

Block 70-43 Summary: Delorme PA 57-58

We took only three waypoints in this block.

We have seen few parks today, but several hunting clubs. Recreation in northern Pennsylvania is more oriented to hunting and fishing than hiking and picnicking.

This block had some corn, small grain stubble, and hay. Some pastures were overgrazed. There were several new houses. Some of the hardwood forests had been thinned. Highway 68 had heavy traffic and the area seemed prosperous, but stable.

Out of block

West of the Allegheny River. Has this been glaciated more recently than east. It continued to be more open. Parts that we drove through reminded me of Wisconsin.

70-73 OH 53 and PA 56

Hay. Abandoned 19th century house. Saw mill.

55 40.46.759 80.27.541 Logs in old coal mine at mill.

40.46.759 80.27.541 Closed school (South Beaver Township Elementary)

Mobile home court.

56 40.46.165 80.27.814 New houses on large lots.

57 40.45.814 80.27.814 South Beaver Recreation Area Beaver. Ball park.

Large houses on large acreages and small houses on large acreages.

58 40.45.868 80.29.763 Ellsman Mine; restored.

59 40.46.562 80.31.401 Strip mine.

60 40.46.092 80.31.882 Strip mine not restored

61 40.46.408 80.32.152 Strip mine and cemetery

58-61 mine photos are near Negley.

Country club just down the road from the cemetery.

P. Mobile homes

Lots of mobile homes. Overgrazed pasture. Forest that is perhaps in old mines (likely). Little pasture. No agriculture. Cluster of mobile homes.

62 40.45.488 80.34.548 Hay field. Pasture.

This block looked much more wooded than Delorme showed. Some new houses on the main road. Mobile homes on the back road.

Pasture, cattle, barn.

Block 70-373 Summary OH 53 & PA 56

Block 70-373 is on the Pennsylvania-Ohio border west of Beaver Falls, Pennsylvania and north of East Liverpool, Ohio. We crossed the Allegheny River on the way to this block. West of it, the countryside was much more open and reminded me of parts of Wisconsin. However, the block also looked much more wooded than the Delorme maps showed.

The residential pattern in this block was some new houses along the main roads and mobile homes on the back roads. This was the first concentration of rural mobile homes that we saw on the trip, but they were common in the rest of the blocks until we returned to exurban Pittsburgh, where the number lower.

Most of the agriculture that we saw consisted of hay and pasture. Forestry was important with a sawmill in the block and logs stored in an old mine.

Mining was also important in this block. We saw unrestored strip mines, a restored strip mine, and an active strip mine.

70-129 OH 52 & 53

Block 70-129 Summary: Delorme 52 & 53

Skipped Block.

Out of block

North of East Liverpool was an active area with much new rural housing and rural subdivisions.

East Liverpool had a large ceramics museum operated by the Ohio Historical Society. Just south of town was the Homer Laughlin China plant.

P. Power plant just North of Empire. Huge. Highway went under it.

Monday Night

Wierton, PA

Tuesday August 14, 2001

The drive to the next block continued the pattern of more open country. It appeared to be even more open than just west of the Allegheny River.

On the way to the block we saw more corn plus some oil and logs.

To Paoli. Rolling hills vs. the short choppy hills that were common yesterday.

Amish sign. Open feel. Broad gentle slopes on hill tops. Pasture.

70-216 OH 61

68. 40.11.878 W 81.26.25. Shocks of wheat. Oil

69. 40.12.488 W 8.26.188. Shocks of wheat. Corn and large barn.

Oil. Furniture maker (only one seen so far—perhaps connected with the Amish.

Hogs, corn, clover, woods.

This block seem messier than others and this ecoregion seems messier than the Interior Plateau.

70. 40.13.214 W 8.26.372 Woods and road.

Oil, cattle.

Pauli. More junky. No evidence of recent LU change.

71. 40.13.968 W 81.26.766 Brush and trees taking pasture.

Rural sleepy area.

72 40.14.240 W 81.26.955 Burning barn: LU change.

Mostly deciduous trees.

73 40.14.478 W 81.27.941 Hay in creek valley and woods

Hay, oil, gas well, hay, corn. New house.

Dunlop Creek Road.

New house.

74 40.14.730 W 8.29.733 Oil tanks.

75 40.14.561 W 8.29.942 Kimble clay and limestone mine.

Postboy Road.

Soybeans

76 40.13.865 W 81.30.418 Gas well. Soybeans. Gas well.

No indication that I-77 has had an impact on this block.

77 40.13.840 W 81.30.603 Tree clearing and thinning. Tree clearing and thinning.

Stocker Ridge Road. Evergreen (pine). Immature trees. Oil, hay, mobile home.

Block 70-216 Summary: Delorme OH 61

Because this block appeared to be stable on the image, we drove through it rather than making a loop.

This was an agricultural block . There was no land use change other than the Kimble clay and limestone mine that appeared to be new. This mine is representative of the clay and ceramics industry that is important in southeast Ohio. There was an Interstate 77 exit near the block, but the highway appears to have been little affected by the highway. We saw carriage signs, but did not see any Amish nor anyone else doing any farm work. Farmers seemed to concentrate on cattle, corn, and hay. We also saw some wheat and hogs. Gas wells and oil wells were scattered along the road. There was evidence that parts of the hardwood forest had been cleared in some places and thinned in others. A sign to a furniture maker provided some evidence of possible local wood use. This may have also been related to the Amish settlement. There were small areas of pine.

Out of Block

78 40.16.338 W8.35.324 Empire Plastics in Newcomerstown

This is an old canal town.

The area around Newcomerstown was oriented to generally parallel streams with activity focused in the medium to wide width stream valleys where there was productive agriculture. These areas were Midwestern/Corn Belt in appearance.

70-236 OH 60-61

Southeast of Tuscarawas.

Corn, hay, stream valley agriculture

79 40.13.73 W8.47.465 Conesville Coal Lands (recreation in abandoned strip mines). Brush and woods on old coal land.

80. 40.12.54 W81.47.210 Pines on coal land.

81. 40.2.460 W81.47.025 Revegetating coal land.

Mostly deciduous trees with some older pines in this massive mine. New planted trees are pine. The new, four-foot tall pines are the only recent change. Out of mine. Hay. Short steep hills.

82 40.964 W3.47.32 Farm house. Two generations of smoke stacks. Sharp edge between revegetating mined land and land not mined.

Back into forested area.

83. 40.11.431 W81.48.283 Church steps (church gone) and cemetery.

84 40.11.661 W81.50.574 Restoration work at mine edge near highway.

The mine, which is the same mine we have been driving through in the block) is active and trucks are hauling coal to the power plant.

Corn

84 40.1.521 W31.51.860 Three Conesville of power plant.

Corn, pasture, hay, oil, corn.

The Norfolk and Western railroad goes near the power plant which also sits on the Muskingum River. Does the power company co-mingle eastern and western coal?

Corn, soy beans

86 40.14.192 81.52.233 Sewage treatment plant in rural area. Just downstream from Tuscarawas River.

West side of Tuscarawas River going S.

87. 40.12.386 W81.53.127 Two of AK Steel. Stainless steel sculpture. Do they make stainless?

The Conesville power plant produces just over 2 million kilowatts.

Block 70-236 Summary: Delorme OH 60-61

This block is southeast of Tuscarawas.

The block had no change except revegetating of recently mined land and the recently mined lands that we were unable to see from the road.

Forests consisted of deciduous trees with some pines that had been planted in coal mines. Some of the pines were only four feet tall. These new pines were the only evidence of recent land cover change that we observed.

Agriculture consisted of corn, soybeans, pasture, and hay.

The Conesville power plant produces over 2 million kilowatts of power a year and uses coal from the massive coal mine that dominates the block.

Not far from the power plant is AK (formerly ARMCO) steel facility.

Out of block

Log truck hauling large hardwood logs.

New road construction.

Lots of activity on Highway 60 south of 16. This area north of Zanesville and I-70 was the first new houses seen on the fieldtrip.

Block 70-280 OH 60 & 70

Hay, pasture, pasture becoming forest, brush.

89. 46.04.33 W82.02.033 Meadow with flowers that we have seen throughout the Pennsylvania and Ohio parts of the field trip so far. Trees. Soybeans.

90. 46.04.266 W82.02.961 Soy beans.

Hay

91. 40.05.006 W82.01.773 Farmstead, pasture, pond. New house.

92. 40.05.412 W82.0.617 New House

Temporarily out of block. Dresden Energy Recycling sign. ??

Powelson Wildlife Area.

Oil well, oil, oil, oil. Gas lines all over.

93. 40.03.386 W8.59.950 One acre oil pad area with revegetation taking place; Terry Sohl.

Vegetation in the Wildlife Area is even aged and immature. This area was probably mined. New houses on the road the Muskingum River.

94 40.02.65 W8.58.680 Lock on the Muskingum River with Ellis Dam hidden on other side. Park and boat launch at river.

Friendly Hills Road.

Trees, recent houses, oil, rural subdivision.

95 40.01.115 W82.00.638 Rural large lot subdivision on Dresden Rd.

From Richvale south to Zanesville there were many new rural houses.

96 40.00.489 W82.00.208 Golf Course

97 40.00.504 W82.00.624 Parr Airport on Fairview Rd.

Zanesville

98 40.00.554 W 82.01.314 Anchor Glass. Worthington Foods, Inc. Zanesville Plant.

Ohio Textile Services also in the industrial plant. Sweet corn.

The north side of Zanesville had houses and new houses.

Block 70-280 Summary: Delorme 60 & 70

This block is located just north of Zanesville, Ohio, which is located on the National Road, U.S. 40, and Interstate 70. Agriculture consisted of soybeans, hay, and pasture, with one area of sweet corn. We did see evidence of pasture returning to trees. Oil, gas, and coal were significant in the area. We saw multiple oil wells and gas lines and were able to document a one-acre oil pad that was beginning to revegetate (93). The Powelson Wildlife area appeared to be an old coal mine. Active exurban settlement and subdivisions became prominent landscape features as we move south toward Zanesville. At the urban edge we documented an airport, large-lot subdivision, golf course, and industrial park.

Block 70-301 OH 70

This block corners block 280. It is at the west edge of Zanesville and has both I-70 and Highway 40. The National Road passed through here.

Mockwood enterprises on 40.

Stable LU on Highway 40

99 39.57.535 W82.04.516 Overview toward Highway 40

Large lots at rural edge—some build during the past 30 years.

Pinecrest Road. Exurban houses on the ridge by the road.

100 39.58.591 W82.05.971 Oil. Hay. House. Barn.

Pasture.

Burkhart

101 39.57.756 W82.06.437 Mobile homes on ridge. Old barn.

Large rural subdivision. They were all mobile or modular and recent.

Young deciduous trees.

Oil, pasture, hay.

Thinning of houses away from Zanesville.

Now new land use changes other than rural housing.

02 39.57.631 W82.08.765 Two of Cell phone tower.

M.T. Sterling. Small houses. Stable. Some new houses close to Zanesville.

Ridge Road. Last thirty years houses, but none new.

Morgan. Soy beans, woods, hay.

103 39.55.736 W82.08.886 Alfalfa and bales

04 39.55.623 W82.08.909 Pasture and cattle. New house

Oil, corn, hay.

105 39.54.973 W 82.09.108 House under construction in hay field.

Many new houses on Ashbury.

Block 70-301 Summary: OH 70

This block corners 70-280 and is located at the west edge of Zanesville.

Both U.S. 40 and I-70 pass through the block.

The block was moderately active with new rural housing growth. Otherwise it seemed stable.

Stable block except for new exurban low to moderate density housing.

Some of these are on large lots with up to five acres of mowed lawn.

Housing ranged from mobile to near mansion. Most rural nonfarm houses

appeared to have been constructed within the last 30 years, and we found pockets of new houses and one under construction in a hay field (105). The density of houses was higher close to Zanesville. Some of the houses were mobile or modular.

Agriculture consisted of corn, soybeans, hay, and pasture. Oil was present in the block, but not as important as in 70-280.

Block 70-326 Ohio 71

Old wooded coal mines. Hay, pasture, cattle, oil.

106 39.48.976 W81.35.334 Pasture. New Houses.

Hay, woods.

107 39.49.445 W81.34.996 New house, new lake. Note: One house with new lake, or new large yard, or thinned trees, or trees removed for cattle modifies an area much larger area than the size of the house or household would indicate.

108 39.49.950 W8.34.614 Cattle in pasture in a narrow valley where the good soil is located.

Ada. Corn in valley south of Ada.

Coal Ridge. Several newer than 30 years along road.

109.39.47.934 W8.33.608 Hay field, corn, trees.

Belle Valley

I-77. They have an entrance, but there is no discernable affect.

Road to Wolf Run State Park had two businesses that the park supported: a drive in and a bait shop.

110 39.47.623 W81.32.147 Wolf Run State Park. Road, trees in grass, picnic tables.

111 38.47.714 W84.32.134 Wolf Run State Park. Lake in strip pit of old coal mine. This park is a recycled mine.

Note: Churches play less a part in the landscape here than in the South.

112 39.47.457 W81.33.941 Log storage area.

113 39.47.341W81.34.053 Nursery

Pasture, hay.

14 39.46.342 W81.35.756 Hay in the foreground. Pasture to trees in the background.

Abandoned and regrown mine.

Block 70-326 Summary: Delorme OH 71

Interstate 77 bisects this block and Wolf Run State Park is in the east-central part of the block.

This block had no LULC changes. This was an area of old, unrestored coal mines covered by deciduous trees. part of one mine had been recycled as Wolf Run State Park. The lake in the park is a strip pit, and the airport north of the may be on mine land, but we did not investigate it. The lake supports two small summer businesses, a drive-in and a bait shop.

There were several rural residences built within the last thirty years. One new house (107) illustrates how a single rural house with a new lake, large yard, thinned trees, or trees removed for pasture modifies an area much larger than the size of the house or household would indicate. The presence of I-77 seemed to have no impact on the block.

Agriculture consisted of corn, hay, and pasture.

70-345 Ohio 71

Old mine covered by immature hardwoods.

115 39.44.557 W81.38.263 Pines planted in the old mine. The mine has been recycled into American Electric Power recreation land.

Old oil. Hay land.

Young, planted pines. Why have pine when most trees here are hardwood and apparently the hardwood will seed themselves?

Forested. Some older houses. Some mobile homes.

Reinersville. Lots of new pine

116 39.40.649 W8.41.169 Three shots of pines. One has Terry Sohl on an old oil tank.

We saw some larger pines and pines are on the image.

117 39.41.029 W81.42.435 Strip mine with water. Strip mine with water.

Cross-section of the geology before the overburden has been removed.

Overburden piles after it has been placed in the mined section; has trees growing now.

Oil.

American Electric Power has planted 50 million trees and has 350 lakes and 380 campsites in two old mined areas.

118 39.43.944 W81.44.271 Strip min lake on AEP land

Recent oil. A few open acres with small trees. 12-15 ft. pines.

Block 70-345 Summary: Delorme OH 71

Changes in this block were restricted to new pines planted in multiple locations in a strip mining areas. We are unclear about why planted pines are a common (but minor) part of mine reclamation, since the hardwood apparently do not need to be planted. Part of a reclaimed mine has been recycled into an American Electric Power park and recreational area, but we were unable to determine its age. American Electric Power has planted 50 million trees and has 350 lakes and 380 campsites in this and one other similar park.

This was a forested block, perhaps because of the high proportion of the block that has been mined. There were some older house and some mobile homes. There was also evidence that this has been a longtime oil producing area and there was also some recent oil activity.

Out of Block

39.35.052 W81.59.397 Two: Overview near Ringgold on 78. Trees of the Wayne National Forest and Burr Oak State Park.

70-381 OH 69

Block 70-381 Summary: Delorme 69

Skipped block.

70-511 OH 80

Weedy pasture. New Rural house on 681. New narrow road into the woods (house?).

Pageville. Small and sleepy.

692. Woods with a few rural houses.

Weedy meadows.

119 39.09.361 W82.09.886 Hay and trees

Old mining is all over in this early part of the block.

143

120 39.09.012 W82.10.22 Corn. Soybeans and cattle.

121 39.09.705 W82.10.875 Dairy cows, but the barn looks like the farmer no longer dairies. Does he sell the heifers or does he milk in a new parlor?

Mobile home. And another.

122 39.09.947 W82.12.494 Typical weedy meadow.

Hay. New drive into the forest.

123 39.09.590 W82.13.181 Mobile home.

New house.

124 39.09.235 W81.12.902 Common for a strip of hay or pasture to be along the road with trees beginning about 100 years from the road.

Conference/retreat center. It was small and seemed to be in a remote area.

Drysdale

Block 70-511 Summary: Delorme OH 80

This block is adjacent to Block 70-510.

Agriculture included corn and soybeans, with hay. We also saw a dairy barn that looked unused, but there were dairy heifers on the farm. This type of operation was common in the ecoregion. Do some past dairy farmers continue to raise dairy cattle to sell to operating dairies? This block had weedy meadows or fields of weeds. This type of field was common throughout the ecoregion.

There were a few mobile homes that have been placed within the past 30 years.

With only six waypoints and no driving loops our block coverage may have been inadequate.

Block 70-510: Delorme OH 80

No changes except for a few houses.

70-510 OH 79-80

125 Small tilled field

126 Meigs mine #2 (Terry has waypoint)

127 39.07.718 W81.15.285 Large open area with grass and oats.

Mobile home.

Note: We have seen weed fields in virtually all blocks. Is this CRP land? If not, what is it?

128 39.07.664 W82.17.998 Meigs Mine No. 2. Three shots.

129 39.03.411 82.17.582 Planted pines. This is the mine entrance with the main building and conveyor belt in the background.

130 39.08.526 W82.19.741 Coal fuel supply business

Chestnut Ridge Rd. Pasture, cattle.

131 Meigs Mine #2. Emergency escape elevator. Air shaft. Pasture.

132 39.10.280 W82.17.167 Orchard with apples, raspberries, peaches, asparagus, peaches.

Block 70-510 Summary: Delorme OH 79-80

This block is adjacent to Block 70-511.

This was an interesting block, but there were no changes except for a few new house. The Meigs Mine # 2, an underground coal mine was in the block. We were able to photograph air shafts and conveyor belts associated with the mine. There were also some planted pines in mined areas. There were poverty pockets here and at toward the north side a large fruit orchard with apples, raspberries, and peaches, as well as asparagus. Agriculture included oats, and pasture along with more weed fields.

Tuesday night

Jackson, Ohio. Had high school mascot of the Iron Men because of an old iron foundry in town. I was unable to find the dates of when it opened or closed. There were nearby parks with the name "furnace" so I wonder if this was both a very old and a mid-old iron or iron and steel area. Merelot (SP) Industries had a cabinet making factory. Does this use the local hardwoods and add value?

Wednesday August 15, 2001

Block 70-559 OH 78 & 85

Jackson and Pike Counties

Wide valley with agriculture. Corn, pasture, cattle. Amish

136 Did Not Get. New house. Amish sign.

North on Gravel Washer Rd. Soy beans

137 Did Not Get. Sand and gravel. Mobiles.

Corn, weeds.

Beaver Town. West on Beaver Pike.

138 39.01.781 W82.49.284 Dry goods store in Beaver

North on 335

Large grassy areas N of Beaver. Woods on ridge. Tilled. Beans, Hay. Pine plantation in a narrow valley. The pines were no more than 4 trees wide in the valley with deciduous trees behind them.

139 39.02.838 W82.248.699 Pine strip in narrow valley.

Gun Clop Road. Forested hills without houses.

40 140 39.03.355 W32.48.170 Pasture and trees with bulldozer. What will go in here. The dozer had made a path. Will the path become a driveway?

141 30.03.204 W82.47.474 Two: Truck garden and pasture; also notice the width of the valley, which is too small to entice a farmer with large equipment.

142 39.03.261 W82.47.435 Perhaps recently cleared pasture. The trees have the appearance of having grown up within a forest.

Large area of planted pines

143 39.03.433 W82.46.635 Pines

144 39.03.952 W82.46.652 New double wide.

Overgrazed pasture. Ridge top houses. Mature pines. Pasture on some hill tops and slopes. Recent mobile

145 Did Not Get. Overviews of pasture with house. Second overview photo also has hay.

New house. Larger valley. More open feel. Corn and houses. The wider valleys have crops and the narrow are mostly confined to hay.

Note: The proportion of pines seems to be increasing as we move south.
Pine 'groves' planted in blocks, often in a strip, beside deciduous trees (that were not planted).

New driveway into forest. Abandoned mobile.

Mobile homes are common in the block, and new houses are rare.

New house.

Relatively recent clear cut with shrubby stuff growing back.

46 39.01.563 W82.47.590 Three shot panorama of the valley.

147 39.01.679 W82.48.739 Corn and dairy.

148 Did Not Get. Amish garden or truck garden (horse poop all over). Corn, peppers, melons/squash/cantaloupe. Alfalfa (E of Beaver)

Block 70-559 Summary: Delorme OH 78 & 85

This was a stable agricultural block. Land use change seemed to be limited to the patches of young pine. Terry said that this may be a clue to changes that took place 30 years ago. The proportion of pines seems to be increasing as we move south. There were some new mobile homes and some new houses in the hills. This block seemed to have a high proportion of mobile homes. Most narrow valleys are no longer cropped, perhaps because they are too small for large equipment and too small to be tilled economically. Hay is common in these valleys. In the larger valleys corn, soybeans, pasture, weeds, were common. There were two truck farms in this block, one was Amish the other unknown.

This was a typical block in that the narrow valleys were mostly confined to hay with the row crops in the wider valleys.

Out of Block

More pines.

149 39.02.149 W82.54.501 Wood products; small logs and a machine with grinding or chipping sounds and appeared to be a truck with chips. Pine chips? If this is a chipping operation it is very small. There were also piles of sawdust, which would indicate that it has products other than chipping.

Hardwood log truck.

H on H23. To the east of 23 is the Nuclear Regulatory Commission Reservation.

Asphalt

150 39.0.153 W83.01.557 Uranium Enrichment Plant sign

Ready mix, sand and gravel.

Photo: Larson Storm Door truck on H 23 heading south. The truck was from an Ohio transportation. Shows linkages and connections with Brookings.

Block 70-687 KY 30

South of Portsmouth and west of Ashland and Huntington.

Tobacco, pasture, wooded hills. Abandoned barn.

Hay and mimosa tree

150 38.32.760 W82.58.495 Tobacco. House and barn.

Corn.

Cub Run Road. This turned out to be a classic hollow with a narrow flood plain that grew more narrow as it snaked back into the hills. The flood plain was

lined with houses. The feeling and appearance was one of remoteness. Many houses were poorly maintained and many yards and farmsteads were junky. The narrow floodplain did not offer enough soil for a decent living and some folks were just scratching by. Other places appeared to be owned by folks who welcomed the opportunity escape to an isolated valley. The flood plain finally ended, but the string of houses continued up into the hills. This was a difficult block because there were people almost every time we wanted to take a photograph.

Cut Run Road from downhill side to up. Brick house built within last 30 years. Mobile

151 Did not take. Pine logs, tobacco.

152 38.32.656 W82.59.402 Houses along the road trying to show that in places the valley supports a near urban density.

Cattle grazing in the forest.

Valley floodplain ends; road continues. Dense rural settlement into the hills.

Poverty. Many dogs.

152 38.32.994 W83.00.580 Saw mill, tobacco, logs.

153 38.33.027 W83.00.827 Newly cleared area of perhaps 15 acres, but the cleared land is scattered with groves of trees left and bisected by a new driveway to the house.

Pines

Mobile. Junk and poverty. New mobile with Doberman.

Note: We did not encounter any guard dog breeds in Pennsylvania. The first was a pack of 'killer dogs' was in 70-216 the first Tuesday block. Dogs have become increasingly common as we move South. There seems to be a correlation between the number of dogs and poverty. Also as we move south the number of guard dogs has increased.

Four hoses and church at crossroad. More houses of crossroad settlement around corner.

Bobwhite Oak Road to the W. Missionary Baptist Church. We did not see any of these in Pennsylvania or Ohio.

Thickly settled. Lots of people out. Do these people have jobs?

154 Did Not take.

Tobacco, new house.

Mined area on the map, but there were no places for a view. Hay

155 38.32.700 83.02.552 Two recently cleared pastures. This is a sizeable area at the top of Dry Hol Rd.

Little White Oak Road from top of valley to bottom. This valley seemed to have a totally different personality from Cub Run. It was a wider valley with more actual farming and with more land oriented activity, such as tobacco farming. Poverty was less evident. It did not seem to be as isolated and there were not as many homesteads that seemed to belong to folks trying to get away from society.

Sheep

156 38.32.186 W83.02.181. Sheep. Fairly new houses with trees cleared and thinned behind the house.

The dense valley population continues.

157 38.31.816 W83.01.878 Two of tobacco.

158 38.31.747 W83.01.735 Tobacco drying in barn.

Corn

159 38.32.084 W83.00.063 ?Tobacco harvest and barn

160 38.32.063 W82.59.122 One juniper tree, some deciduous trees, and a pine grove.

Cleared pasture with some trees left. Tobacco.

New Christian Baptist Church.

Highway 7, the wider valley main road.

New house and another. Three recent mobiles. New barn. New house. Woods and pasture.

Block 70-687 Summary: Delorme KY 30

This block is located south of Portsmouth, Ohio and west northwest of the Ashland, Kentucky area.

The Ohio river continues to be a major cultural divide.

This block had a dense Spersopolis pattern in the valleys and along the roads in the wider valleys.

During the last thirty years we estimated that the proportion of houses built on our sample roads were as follows: Cub Run 20%, Little White Oak 50%, and Highway 7 50%. This block is within commuting range of Portsmouth and Ashland, which might explain the high population density. Several previously forested areas had been cleared for pasture, but it was hard to estimate the size of these because we could not see over the hill tops. There was little other change that we could see.

Agriculture included tobacco, corn, hay, and pasture. Sheep were also fairly common on some of the small valley farms. The image showed mined areas, but as we discovered, viewing mines in Kentucky and West Virginia was not as easy as it was in Pennsylvania or Ohio.

Note: We did not encounter any guard dog breeds in Pennsylvania. The first was a pack of 'killer dogs' was in 70-216 the first Tuesday block. Dogs have become increasingly common as we move South. There seems to be a correlation between the number of dogs and poverty. Also as we move south the number of guard dogs has increased.

Cub Run Road. This turned out to be a classic hollow with a narrow flood plain that grew more narrow as it snaked back into the hills. The flood plain was lined with houses. The feeling and appearance was one of remoteness. Many houses were poorly maintained and many yards and farmsteads were junky. The narrow floodplain did not offer enough soil for a decent living and some folks were just scratching by. Other places appeared to be owned by folks who welcomed the opportunity escape to an isolated valley. The flood plain finally ended, but the string of houses continued up into the hills. This was a difficult block because there were people almost every time we wanted to take a photograph.

Little White Oak Road from top of valley to bottom. This valley seemed to have a totally different personality from Cub Run. It was a wider valley

with more actual farming and with more land oriented activity, such as tobacco farming. Poverty was less evident. It did not seem to be as isolated and there were not as many homesteads that seemed to belong to folks trying to get away from society.

Out of Block

AA Limestone. This was a massive quarry on Highway 9. An entire hill top had been removed plus there was a deep pit. we saw a second entrance some distance west of the main entrance.

Cleared forest that is regrowing.

Highway 9 is a wide, new road with moderate traffic. Is this a pork highway. Empty log truck.

Block 70-666 KY 29

Vanceburg is in this block.

Fingerboard Hol. This road fit the number 666. This narrow road was lined with No Trespassing signs, junk, structures that seemed to be owned by poor people. There was no land use change except for a few houses. The road had no outlet even though Delorme showed one. Perhaps the road was a metaphor for the people who lived there. The older two of three generations of males at the hilltop turnaround (aged 60, 30, and 2) were not welcoming. The movie Deliverance came to our mind. The place had acres of junk and the blank stares made us wonder poverty, hope and other things.

Fingerboard Hol bottom to top.

Several older mobile homes. One older house. One house constructed in the last 30 years.

Woods. New steep road into the woods. Logging?

End of road! Dead end. Junk.

161 38.35.301W83.17.655 House

162 38.34.857 W83.17.044 'barn'

Temporarily out of block: Trees harvested from large areas along highway 9.

Vanceburg. Empty store front. Only about two businesses that seem to be prospering. No land use change. Kudzu

163 38.36.160 W83.19.005 Fishing memorial to Jim Bob Brown. Ohio River.

One new house in town. It was in infill from a fire or demolition.

Looks like trees have been removed from the hill top with a fringe beauty strip left.

164 38.35.884 W83.19.812 Logs. Strip Mall. Hill with trees gone from top.

165 38.36.201 W83.9.480 Nine West (shoes and perhaps clothing). Nine West was closed, but the business did not have a closed look to it, so perhaps it was a summer recess.

Out of town on 8 along Ohio River.

Hay

166 38.37.107 W 83.19.607 Meadow, overgrazed weedy pasture, Ohio River, in Ohio the Shawnee State Forest. Road and trees.

Strip housing.

167 38.37.869 W83.20.423 Cows, overgrazed weedy pasture.

Tobacco, mobile home

Side road to south. Nice new place. Hay. Tobacco. Strip housing.
168 38.37.880 W83.22.041 Power line and chemically killed vegetation in the right-of-way.

169 38.37.890 W83.21.995 Tobacco Barn. Trash. Mobile home being moved.

170 38.38.128 W83.20.846 Tobacco

Block 70-666 Summary: Delorme OH 84 and KY 29

This block was on both sides of the Ohio River, but we visited only the larger portion on the Kentucky side. Vanceburg was in the block.

The block was a poor stable area. There were rural houses along the Ohio River flood plain and hollow roads. Some houses were constructed during the past 30 years and mobile homes put in during that time. The major land use change appeared to be forest harvesting in areas that we could not see, but we often saw ridge top fringe trees.

Agriculture was minor in the block. It consisted mostly of cattle and some tobacco. Weed fields and overgrazed pasture were also common. We saw some small log lots in Vanceburg. We did not visit the Ohio part of the block, and could not see it from the Kentucky side because of a forested levee on the Ohio River.

Vanceburg was stable or declining. The town seemed to have little prosperity. Nine West had a plant of some kind, but it was closed, though from appearances it had recently been open. Perhaps the plant was on summer vacation. It would employ one a few persons.

Out of block: Between 70-666 and 70-765

Lumber mill on H9. More tobacco. Pasture returning to forest. Junipers appeared south of the Ohio.

When we crossed into the Interior Plateau Ecoregion on Highway 9 west of Vanceburg the country became open. Juniper appeared and the land seemed significantly flatter while the proportion of land that was forested declined.

There were large areas of flat land. The boundary holds there.

Block 70-765 KY 39

Mobile homes.

H 211

New house, mobile, abandoned farm.

171 38.04.563 83.39.04? Mobile home. Hay and pasture

172 38.04.281 W83.39.392 Farm and hay. New house in trees.

38.04.159 W83.39.588 Two of a Christian Camp.

173 38.04.089 W83.39.791 Pasture

174 38.03.591 W83.40.112 Tobacco harvest and hill side area.

Houses along road. No sign of a National Forest when looking at the land.

New house, new lake, resort

776 38.01.990 W83.38.27 Front are beans, back is corn

177 38.01.682 W83.38.096 Carrington Springs golf course that is new since 1992.

178 38.00.379 W83.37.805 Tobacco and black barn.

Block 70-765 Summary: Delorme KY 39

This block is located in two ecoregions: the Allegheny Plateau and the Interior Plateau. It is located in the Daniel Boone National Forest about 20 miles east of Lexington, Kentucky.

Agriculture occupied the river and creek valleys. Common crops included tobacco, corn, and soybeans. Hay and pasture land was also common. This block is in the Daniel Boone National Forest. We saw no sign of the national forest and little evidence of its existence. The Carrington Springs Golf Course was new and along with a church camp were some rural recreation land uses that might have been located in the block because of the National Forest. We spent too little time in this block to do more than a drive through on the main road. We may have missed evidence of the National Forest.

This block was located in both the Allegheny Plateau and the Interior Plateau. While we saw dramatic evidence of the ecoregion boundary driving to this block, we did not see evidence in the block.

Out of Block

Hardwood log trucks north of Frenchburg on Highway 460. More logs near Stanton

179 37.49.435 W83.55.548 Tobacco rack or cart in the field with tobacco hanging on it.

Some areas that had trees removed. Logs. We have seen substantially more logging in Kentucky than in Pennsylvania or Ohio.

180 37.48.064 W83.59.660 Classic karst knob.

Block 70-798 KY 53

Woods, new house, old mobile. Housing along H 89

Bev: the traffic has been heavier in Kentucky than in Pennsylvania or Ohio.

181 37.43.479 W83.59.629 Wetland with cattails; old mine fill. Stream in the mine fill with rust colored water.

182 37.43.360 W 83.59.814 Carhart sewing on old mine.

183 37.43.269 W83.59.767 Two of mine pool. Carhart parking lot on old mine

184 37.43.389 W83.59.805 Mine. Kentucky Refuse Pile

185 37.43.415 83.59.874 Camel Refuse Pile. Kentucky Processing.

South of the mine into Irvine. Strip houses and busy streets.

186 37.42.766 W83.58.560 New apartments at north edge of Irvine. There were seven buildings in total.

Mansion on a knob east of town. Kentucky River.

South of Kentucky River. Soybeans in the floodplain. Square bales being moved.

187 37.41.708 W83.58.630 Log truck

Corn

187?? 37.40.777 W83.58.085 Corn and knobs. Pig. Pig.

Back north of the Kentucky River in Irvine.

New bank.

Massive rail terminal that was virtually empty.

188 37.41.068 W83.57.244 Rail terminal. The tracks had been used recently, but perhaps not frequently.

189 37.41.368 W83.56.656 Estel Wood Products (pallets). New house in the woods.

Person drove out of Estel Wood Products in a pickup. "Can I help you? Me: No I don't think so. "You just taken pictures? You're not from the EPA are you?"

190 37.41.427 W83.56.656 Preparation for expansion of the new subdivision in which the last house (189) was photographed.

Another wood product business.

Rural subdivisions. House strip and businesses on H 52. Irvine to Pitts on Irvine valley part of the road. The houses and businesses stopped when we began to climb the hills.

Asphalt plant. Kudzu.

191 37.42.559 W83.53.623 Tipton Quarry. Is this quarry new? We could only see the employee parking lot and the entrance. It might be a large operation. Our MRLC image did not have it.

Block 70-798 Summary: Delorme KY 53

Irvine, the major town in this block, is located about 21 miles east of Richmond, a town of 21,000, with the Blue Grass Army Depot located between the two towns.

Land use changes included an unknown mine at the northwest side of Irvine and a potential new quarry northeast of town. The town gave mixed signals. The new apartments on the north end of town indicated that there is a shortage of housing or that the town is growing. Yet there were some empty store fronts and the massive rail terminal showed no signs of activity. The Carhart plant was new located on an old mine and was new.

One sign at a mine that was partially restored and may also still be open said that the owner was Kentucky Processing. An internet search found Central Kentucky Processing, which provides the following services: Plating: Electroless, Black Oxide, Zinc, Nickel, Phosphate, Passivate, Deburring, Cleaning Heat Treating: Austempering, Carburizing, Carbonitriding, Vacuum, Induction, Through Hardening, Tempering, Annealing, Normalizing, Neutral Salt Hardening.

Agriculture included soybeans, corn, and hay. There may have been more, but we concentrated our efforts at the mine and in Irvine. East of town were two wood products business. While I was photographing Estel Wood Products a man drove out of the business He asked "Can I help you?" I replied, "No I don't think so." He then asked "You just taken pictures? You're not from the EPA are you?"

Highway 52/213 northeast of town had many new houses and strip businesses. There was also kudzu along the road. We saw kudzu only a few times in this ecoregion. The Tipton Quarry (191) may have been new (it was not on the MRLC image or interpretation). From the size of the employee parking lot, it may have been a large quarry, but we could not see beyond the entrance.

Note

We saw mobile home manufacturers only in Pennsylvania.

We have seen no irrigation units.

Out of Block

Pines and logs

192 37.46.078 W83.49.671

Clear cutting for hobby farm

23 from Pitts to Stanton was beautiful.

Daniel Boone National Forest east of Stanton and especially east of Slade did not look like the ecoregion. The proportion of pine and other evergreen was much higher. The area was totally forested. There were limestone cliffs.

West Liberty. Prison in an area that may have been a reclaimed mine.

193 37.57.89 W83.09.45 Cane for sorghum.

Block 70-770 KY 40

194 37.57.334 W83.08.848 Tobacco.

195 37.57.369 W83.08.868 Lumber mill

New house, tobacco, weed field, mobile, hay, last 30 year house. Settlement along the valley SW of Crockett. Some pine, hay, mobile home, corn, tobacco hay.

Crockett.

Mowed hill without a fence. New dirt drive up a hill.

196 37.59.665 W83.04.996 Older strip housing.

Recent drive to a mobile.

Near steady strip housing on 706 N of Crockett.

New drive. Indirect evidence of an old mine on east size of 706. Is closed and revegetated. New double wide. Old oil pumper. Gas well

197 38.01.133 W83.02.813 Gas well, meadow, house in background.

New house

198 38.00.954 W33.02.776 Happy Gizzard Hollow.

New house.

199 38.01.320 83.02.909 New house.

200 38.01.531 W83.03.03 Weedy meadow.

201 38.01.591 W83.03.123 Lumbered hill, log road, skid mark.

Block 70-770 Summary: Delorme KY 41

This was a strange block. There were few roads and evidence of activity on hill tops where we could not see. These activities could have been related to mining or lumbering. We did see one lumbered hill and a road to the hill top that may have been a log road or skid track. There were some new houses.

Agriculture included corn, tobacco, hay, and weedy fields. There were some pine trees, and indirect evidence of an old mine that is now closed and revegetated. We also saw oil and gas wells.

This block probably deserved more time.

Kentucky Note:

Where do people work? We have not seen income producing centers.

There is a high proportion (nearly 100%) of yard work being done by

women. Why? Possible reasons include broken families, division of labor, or men working far away perhaps on seasonal jobs.

Out of Block

South of Isonville on Fannin there were signs of recent oil activity with new storage tanks. We saw a small gas flare
 Where do people work? We have not seen income producing centers. There is a high proportion (nearly 100%) of yard work being done by women. Why? Possible reasons include broken families, division of labor, or men working far away perhaps on seasonal jobs.
 Look at a recent air photo of 770.
 We did not see much hay in Kentucky
 Night in Ashland, Kentucky.
 P. Scottstown, Ohio covered bridge.

Wednesday Night

Ashland, Kentucky by the railroad tracks.

Thursday August 16, 2001

Block 70-655 OH 86 and WV 41-42

We looked at the Ohio side only because there was no timely way to cross the Ohio River.
 Hay, junky mobiles, older house, 200 yard wide valley, corn with invasive cane, grassy unfenced meadow (hay?), weed field.
 203 38.35.896 W82.18.921 Weed field in 100-150 yard wide valley. Road
 Hay, weed field, wooded hills, United Baptist Church
 204 38.36.383 W82.218.679 Hay and farm
 Recent mobile by the road.
 Small and old farmsteads.
 Tobacco and more tobacco. Dairy cows on farm that used to be a dairy.
 Mobiles. New house
 209 38.38.721 W82.16.634 hay and house
 Rocky Ford Rd
 Portable saw mill. This had been recently erected and was in operation when we drove by. Just to the south of it was a new road up the wooded hill. Perhaps the logs came from there. We saw signs of harvest along the road that went at the foot of the hill. There was also a for sale sign in the trees, so the land or perhaps lots were for sale.
 210 38.38.540 W82.18.353 Tobacco, hay, barn in valley.
 Two houses that looked like barns and had no windows. Abandoned mobile home. Overgrazed pasture. Some pines.
 Ridge Road (no name, but probably a continuation of Sowards Ridge Rd.).
 Three old mobiles, another, another, another, new small house, two mobiles
 211 38.38.012 W82.15.593 Eroded pasture.
 Tobacco, more mobiles and houses. Very dense rural population.
 Sowards Ridge Rd.
 Many people are out and about. Do these people have jobs?
 212 38.37.308 W82.16.211 Mobile strung along ridge road.
 Double Creek Rd. Woods, sandstone outcrops, mobile at bottom of steep road.

213 38.36.823 W83.15.828 Recently thinned trees and some brush hog work. Small valley field (perhaps 50 feet wide)
Brush taking pasture.

214 33.36.013 W82.15.358 Two. Barge loading or unloading facility being dismantled. Symbolic of the land use changes in the industrial heartland that go along with deindustrialization. This facility was on the Ohio River.
Crown City on the Ohio River. Some new houses (small) Well kept, clean town.

Corn, tobacco. Old highway along the Ohio parallel to new H 7. There was a mixture of old and new houses.

215 38.33.347 W82.17.698 House on the Ohio River.

Block 70-655 Summary: Delorme OH 86 & WV 41-42

This block was in Ohio and West Virginia. We visited the Ohio portion, which is located about 10 miles north of Huntington, West Virginia.

The rural population was very dense in portions of this block. Agricultural land covers included corn, hay, weeds, tobacco, pasture, eroded pasture, sprouts invading pasture, and overgrazed pasture.

We saw a portable saw mill that had been recently installed and was in operation. In a different part of the block we saw a forest that had been thinned and just outside of the block I had the following conversation. We had stopped in Miller just outside the block on the southern end. The convenience store/bait shop where we stopped had been a restaurant; the back room on the way to the restroom had a full kitchen in stainless steel that was being used to store odds and ends. Outside a man saw our Delorme atlases as he was getting into his pickup. He said, "You guys buying lumber with those topographicals?"
The corridor along the Ohio river had small towns and houses that ranged from old to new. We also observed a barge loading or unloading facility being dismantled. This was symbolic of the land use changes in the industrial heartland that go along with the deindustrialization that has occurred during the past 30 years.

Out of Block

We stopped in Miller at a bait shop/convenience store for snacks. The convenience store used to be a restaurant; the back room on the way to the restroom had full kitchen in stainless steel that was being used to store odds and ends. Outside a man saw our Delorme atlases as he was getting into his pickup. He said, "You guys buying lumber with those topographicals?"
South of Miller there were many new houses along the Ohio.

East of Huntington, WV to Nitro I-64 in the Teays Valley, there seemed to be substantial growth.

I-79 east of Charleston, WV. Mostly trees. A high proportion of pasture had sprouts growing. The tree cover seemed to be even aged hardwood with occasional pockets of pine.

216 38.49.031 W80.51.194 New road to hill top

Photo: 38.47.865 W80.51.424 Recent oil tank (the clay was not covered by grass. The pumper was not working and there is a house at the bottom of a steep ridge.

Block 70-576 WV 35 and 45

Narrow valley with pasture.

217 38.46.658 W80.49.321 Old small pasture with bushes and sprouts; this pasture had not been mowed recently; old barn.

More pasture returning to trees. Two doublewides.

218 38.46.984 W80.49.956 Two of hill with sprouts—wide angle and zoom.

Ottenban (sp) Methodist Church

219 38.46.365 W80.49.768 Cleared hill and road to hilltop.

House and hill pasture. Three new houses, woods. Two old houses. The road is normally in the valley.

220 38.47.451 W80.50.536 House and lower slope pasture. Oil machinery and brush invading a pasture.

Baptist church.

Lower slope is pasture with a distinct woods line on the upper slope is common.

The line become indistinct when mowing ceases as the boundary returns to brush and then trees.

Into Gilmer County.

Side valley with a larger meadow at the intersection of the two valleys. These intersections where there is more flat land and often an intersection of roads are common locations for houses. New or newly painted oil tank.

221 38.47.992 W80.51.295 Trees cleared and new road along the contour.

House with road in background.

We have seen several of these roads. They all appear to be new or recent. Do they go into logging areas?

Abandoned mobile, house with several mobiles, small pine grove

CR 6

Break between 221 and 224.

224 38.47.722 W80.41.166 Road in trees. House. Pasture. Pasture.

Pasture with immature walnut trees that had not been cut.

Patchy, even aged stands where mowing particular parts of pastures and hay fields stopped at different times.

Small farmsteads on the east side of CR 6. Many pastures but few cows. East slope had older, well-maintained, fairly large house.

Hay—just a few bales here and there.

N or CR 19-17

Mainly trees. Mostly older houses. Few mobile homes. The lack of mobile homes and new houses probably means that this is a stable area.

New oil pump.

CR 2-2 to Copen. Mobile.

225 38.50.042 W80.46.487. Hay, gas.

226 38.49.985 W80.46.465 Grass on hill top. New house on hilltop. I suspect hilltop pastures. This was the only hill-top road that was accessible, because most were on distant slopes in a private woods. This road seemed to be new. I suspect that these pastures are becoming, but that the hilltop house is still rare.

Block 70-576 Summary: Delorme WV 35 and 45

Valleys had virtually no land use change. They were dominated by hay, grass, and older farmsteads. Hill slopes pastures had change with some of

the upper slopes near the trees reverting to forest. Hill tops were not visible, but we saw small roads going up slope. These roads normally appeared to be recently constructed. Were these roads for lumbering or are the hilltops being converted to pasture, or both? If they are becoming pasture, are the old trees bulldozed off or is the forest first harvested. The only one that we saw had been converted to grass and it also had a new house that appeared to be a weekend house (see slide 226).

This area seemed to have resurgence in oil and gas with evidence that there had been older oil and gas exploitation as well. Agriculture consisted of hay and pasture, with some of the pastures returning to trees on their upper fringes.

Block 70-578 WV 45 & 35

CR 3-5 on the west side of the block

Narrow valley. New modular homes. Well-kept older house. Hay. Gas well.
227 38.48.740 W80.38.088 : Hilltop house at end of CR 3-5. Mobile and hilltop house at end of CR 3-5.

228 38.48.674 W80.38.201 Brush retaking pasture.

Gas lines.

Highway 5.

Pasture that may have been cleared during the past 30 years on the slope on west side.

CSX rail line beside CR 5. Sprouts retaking the pasture. Logs by roadside. Oil tank by roadside.

229 38.46.831 W80.38.454 New road into forest. Old steep road up slope but grown over during the past 30 years (logging road?). Pile of logs by roadside.

We heard a chain saw at this stop.

Mobile. Recent mobile.

Crossed CSX tracks. Now SE of them.

Older house. Houses are well maintained. New houses. Large lawns.

230 38.46.011 W80.38.291 New house on large lot.

North on 19.

More open land (pastures), but no valley. Pastures to brush. Hay.

Photo. Two. Logging truck going down the road.

Well kept houses and lawns. Mobiles that were well kept with large lawns.

Logs by roadside. Over the crest and down the NW slope. Poorer houses and mobiles. Some evergreen trees. Camping. Burnsville Lake is in the block.

Recent road up into the forest. Pasture. Horses.

231 38.47.244 W80.34.410 House. House in pasture context.

231 38.47.237 W80.34.082 Hill top pasture to the west.

233 Did not take.

Much woods.

234 38.46.453 W80.33.199 Water falls at Falls Mill. New mobile on new hillside terrace. The mailbox said that the Wimers lived there.

Some pines

Block 70-578 Summary: Delorme We 45 & 35

I am not satisfied with our coverage of this largely forested block. We did not go into the Burnsville Land Wildlife Management Area, which was a dominant part of the block. It included hunting, camping, the Burnsville Lake Project, a chapel Turnpike Trail, and Bulltown Historic District. Nor did we drive the side roads that went at the park's edge, where there may have been residential development associated with the area. The new mobile (Photo 234) provides a hint that the park may be attracting some new growth. The land use change that we saw was limited to a few new houses, some of which had large lawns. Additional changes include pasture returning to trees, and new roads that went up into the forested hill tops and that may be associated with lumber or new pastures. Agriculture was limited to pastures. There were also some gas wells

Out of Block

logging truck.

235 38.47.017 W80.31.177 Clear cut.

Another clear cut with slash on the ground. I suspect that there is more forest clearing than we saw.

236 38.48.043 W80.2(?90.780 ?Lumber mill? in Ireland, WV

Log home developer/builder in Ireland

Buckhannon. An active town with a declining core. Highway 33/119 intersection seem to have made this a lively place.

Block 70-500 WV 35

This block is just west of Buckhannon, West Virginia. It is in two ecoregions. The west edge of town was dynamic, but fell just outside the block.

Horse farm

CR 5-2 to CR 6-1

New house. Old house for sale. New log and stone house.

237 39.01.320 W80.17.549 Corn. Hay. Land management differences with one side mowed and one unmowed. New house.

New rive into a woods lot with an overview house.

238 39.01.976 W80.17.329 Old house torn down with a new house on higher ground built for the view.

Regrown pasture. Cows. Houses for sale. New houses. Planted pines.

Pasture. Gas well. New house under construction.

239 Terry has GPS reading of Woody Forest Products lumber mill. Photo 240 has close up of the mill.

240 39.00.792 W80.17.492 Woody Forest Products is the business. Two photos. Drying kiln. Dried wood and Terry. Is this flat area an old mine bench?

Allon Concrete and Bricks.

241 39.00.772 W80.18.361 Appalachian Forest Products. Each hardwood log has its own bar code.

CR 12

242 39.01.088 W80.18.714 Small corn field. This is the first corn that we have seen in awhile.

New houses, pasture, evergreen trees. Forest View Estates. This had ten houses that were modest and had been built during the past 30 years, but they were not new.

Corn. New double-wide. Well kept houses. Pasture that was not mowed.

Some large lawns. Oil tank.

Road becomes gravel. Woods. Large house and maybe pasture over the ridge.

243 39.02.024 W80.19.564 39.02.024 W80.19.564 Road view, trees on

gravel. Overview.

Corn. New houses in valley. Community of houses. Oil, pasture, oil.

Significant oil.

244 39.02.545 W80.19.456 Pasture, barn, cattle.

Tried to find a strip mine that was on the image, but we could not get to it. Gas well. Several roads to hill tops (forest conversion?)

246 (45) 39.03.096 W80.20.630 Corn. Columbia Gas Transmission.

Corn fields are small.

247 (46) 39.03.193 W80.21.189 Corn tassels from the top. Two: Cleared hill side and top with cows and new house. Cleared hilltop pasture (finally a visible one).

Block 70-500 Summary: Delorme WV 35

This block is just west of Buckhannon, West Virginia. The block was in two ecoregions, the Western Allegheny Plateau and the Central Appalachians. The ecoregion boundary was not distinct, but farther east in Buckhannon the Ridge and Valley characteristics were more noticeable more open land.

The west edge of town was dynamic, but fell just outside the block.

There were a significant number of new houses 1) near Buckhannon, and 2) in scattered pockets. Several new roads to hilltops. Our last stop (247-46) showed that these may be hilltop pastures. Mining may have made a significant and use change, but we could not get to a mine without trespassing. Oil and gas was significant as was gas transmission and related gas activities. More agriculture than the last block (70-578). Agricultural land covers included corn, hay, and pasture. Wood products were significant. There were pockets of high rural density.

Out of Block

Weston: Equitable Oil Production.

Continued evidence of hilltop grasslands. Mobile homes.

H 47 NW of Troy

Eroded farm.

Block 70-496 WV 35

248 (47) 39.02.176 W80.47.273 Eroded pasture and cows.

Hay, double wide, some pine. Older mobile homes, and a house with junk.

Wooded. Eroded pasture. Brick house. Generally modest housing. Junk.

Brush.

249 (48) 39.02.281 W80.49.209 Brush encroachment on pasture

Oil. Brush encroachment on pasture. Working oil pumps.

250 (49) 39.02.909 w80.49.437 Working oil well.

Oil, junk house.

Horn Creek valley. Little soil and narrow. This valley seemed to be converting to forest. Mobile homes.

251 (50) 39.03.806 W80.48.897 House

Mobile.

Rain.

Valley without houses. Brush encroachment. Very narrow, mostly wooded valley. House. Gas well.

252, 253, 254 39.05.361 W80.46.965 Back to the land house. Terry's photos are of ostriches, and ostrich egg and llamas.

254 39.05.294 W80.46.811 Badly eroded hill. This site was not common.

255 39.05.244 W80.46.690 Hay and oil

Hill top road

Block 70-496 Summary: Delorme WE 35

There were too few roads to get better coverage in this block.

No visible land use changes. Few new houses. Modest to poor housing.

The poor housing had junk strewn about. Oil seemed to be significant.

There were no crops. There was evidence of change on the hill tops, but the roads were in the valley. Sprout encroachment was significant, so this block is probably becoming more wooded. Agriculture consisted of pasture, eroded pasture, hay and one back-to-the-land farm.

Block 70-419 WV 24

This block has West Union on its south.

S of West Union on H 18

New oil. Oil. Mobile. Group of mostly new houses.

H 18 NW of town

256 39.18.641 W80.46.802

Major gas pipeline (Dominion)

Large lot houses. Mobile

257 39.19.562 W80.48.131 Gated mobile/modular subdivision

Road to cleared land

Gas compressing station on N side of road.

Large hay field. Large open area on S (a ranch ?)

258 39.19.506 W80.49.867 Pasture and cows. House being remodeled.

Pasture with oil and gas.

260 39.19.383 W80.49.546 Gas well.

One person saw mill.

261 39.19.094 W80.49.425 Oil and gas area. Gas works.

Mobile.

Block 70-419 Summary: Delorme WV 24

This block is located northwest of West Union. Rain and lateness in the day prevented better coverage of this block.

Gas is very important. There were many gas wells, compressor stations, etc.

The image shows many new gas wells, but they were inaccessible. There were some new houses near West Union and evidence that wood is

important. It was late in the day and getting dark with rain clouds. We did not spend much time in this block.

Thursday Night

Clarksburg, WV

Friday August 17, 2000

Block 70-208 PA 71

Includes Denora site of the largest industrial catastrophe in the U.S. when X number were killed when an inversion trapped air pollution. Monongahela River, I-70, and two ecoregions.

H 51 had four lanes and much traffic. Sign about a Christmas tree farm.

H4048

261 40.07.535 W79.46.589 Small farm with cattle. There was a strip of older houses across the road (an earlier generation of rural strip housing).

262 40.07.710 W70.46.915 Corn, hay, hillside hay, small grain stubble

263 40.07.548 W79.47.283 Large lot, recent rural house

Brush, mobile, corn.

Brick houses are common. Hills.

Bev: the houses seem larger here.

Pasture corn.

The proportion of open space is greater here

264 40.06.991 W79.48.376 Corn and grass on hillside contour. Pasture on hill.

265 40.06.947 W79.48.491 Hills of pasture and hay ground.

Orchard or vineyard on Delorme (marked A on map) is gone.

H 4021 N

266 40.07.248 W79.49.095 Three slide left to right panorama to the west.

Wooded hills, corn, hay land.

New brick house in rural area. Old brick house. Stone house. Cattle. Two massive brick houses. These new houses were on the east (up hill) side of the road with a view to the west.

Ridge Road to the East

Pasture, hay land, strip of new house, mobile.

Vineyard or orchard (B on map) were only two rows of vines. Did it shrink or is it a map error.

267 40.08.771 W79.47.645 Hay, pasture, and wooded hill

Clover.

268 40.08.740 W79.47.374 Russian Orthodox church. New subdivision. Sign for new subdivision.

Massive brick house. Abandoned pasture (nearly ripe for subdivision?)

269 40.08.850 W79.46.620 Church center.

270 40.08.931 W79.46.366 House with two yards (one had 3 acres the other 7 acres), with both yards mowed.

H51 We missed getting a photo of a golf course

I-70 W

Holiday Inn, barn with hay, back side of a housing strip, hay

Exit 21

H201 N

On south side of the exit was a cluster of motels, restaurants, and some retail.
New apartments, strip of land 30 year old housing, greenhouses
Signs that this used to be farmland (old barn in the trees)

Left: no name

Large mowed pastures, lawns, fields

Left

Few mobiles

271 40.69.647 W79.50.429

Cluster of houses. Small older house. One in center is new.

272 40.09.831 W 79.51.260. Denora from east side.

273 40.09.704 W79.50.658 Abandoned farm. Old mine or quarry.

274.09.024 W79.50.767 Abandoned mine now restored. The surface had slag and bricks so there is probably demolition fill here.

There is a land fill NW of the mine. Is it new or old. Is it on an old mine.

W on I-70

Block 70-208 Summary: Delorme PA 71

This block includes Denora, site of the largest industrial catastrophe in the U.S. air pollution killed 50 persons. The Monongahela River and I-70 are located in this block. The block is also located within a string of old mining and industrial cities along the Monogahela River south of Pittsburgh. The eastern part of the block is located in the Central Appalachians. .

This was a dynamic block outside the urban areas. We did not have time to explore the older urbanized zones. There were pockets of exurban growth from one house to subdivisions. Two vineyards that appeared on the Delorme map were gone. There was no visible evidence of one and the other had two rows of grapes. There was a restored mine and a new landfill. This was a more urban block with resulting larger houses and larger lots than we had been seeing. There were few mobile homes in the area. There were farms and old barns indicated that there in the past there were more farms than today. The agricultural land was mostly corn, hay, and pasture.

This block had an open feeling with much open space and a much lower proportion of trees than any other blocks except for the broad stream valleys of southeastern Ohio.

Agricultural covers consisted of corn, small grains, hay, and pasture. An abandoned mine has now been restored (277) and a new land fill has been built, perhaps within part of the old mine.

Block 70-204 PA 70

Washington, Pennsylvania was in the center of this block, which is located about half way between Wheeling, WV and Pittsburgh. I 70, I 79 and U.S. 40 intersect here.

Craft Rd.

Large grass areas. Strips of houses.

275 40.08.620 W80.13.780 House. Lot for sale.

Lots of grass.

276 40.07.985 W80.13.952 Mobile park.

277 40.07.911 30.14.161 Communications tower node with 8 towers. Low density rural houses.

Hay, trees, pasture going back to trees.

Scenic Rd.

Strip of houses

Two public water supply reservoirs but they were privately owned and we were unable to photograph.

278 40.08.947 W80.15.977 High school. Power line and houses. School football field. The school appeared to be 25 to 40 years old.

H78 S

Housed on both sides by there were no back streets. Washington's urban edge.

279 40.09.591 W80.16.379 Three shots. Mall on restored mine. The mall is at the intersection of I-70 and U.S. 40. The image is 1973. The mine had already been restored then.

U.S. 40 W of I-70.

New

280 40.09.402 W80.17.560 Cleared hill (There were large horse pastures next to this recently cleared area. Was the hill cleared for pasture expansion?). West Penn Wire Cut Cable Design (2 of the 3 buildings in the photo).

McKee Rd. N

Strip houses, old farm

281 40.09.720 W80.18.764 Overlook. Yard and hayfield. Can you tell the difference? The hay is slightly higher than the grass, because it had been mowed and baled a few weeks earlier. The photo also has a mobile home in it. This block is more open than our other blocks except for the last block (70-208).

282 40.11.422 W80.18.646 Covered hay stacks. Mobile home court. Young corn. Mobile court.

Is this a rural area or an urban area? There are strips of houses on both sides of the road, but there are fields and farms behind the houses, which are only one house and yard deep.

283 40.11.752 W80.17.205 Three. Dogwood acres; condos from \$119,000, under construction.

284 Did not take

284 40.12.259 W80.15.574 Washington: Penn Plastic.

285 40.12.339 W80.15.657 WEWJA Treatment with landfill in background.

286 40.12.607 W80.15.776 Arden land fill. This is a large landfill that may be in an old mine.

287 40.12.392 80.15.445 County fair with old mine in background. Landfill with fair in foreground.

It looks as if there are a series of public facilities on the old mine property (landfill, waste treatment plant, county fair grounds, museum, and health complex.

288 40.12.607 W80.15.169 Washington County health complex that may be in the old mine.

Sherwood Washington Plant, Gas equipment division.

289 40.12.745 80.14.913 Two. New construction just east of the health complex on the south side of the road.

I-79

290 40.12.496 W80.14.360 Washington County Golf Course.

Block 70-204 Summary: Delorme PA 70

Washington, Pennsylvania was in the center of this block, which is located about half way between Wheeling, WV and Pittsburgh. I-70, I-79 and U.S. 40 intersect here. We devoted most of our time to the rural and urbanizing parts of the block.

Mixed LULC change. Parts of the block were stable, parts were active, and parts have recently undergone massive transformation. Hewitt Avenue by the fairgrounds was particularly dynamic with public facilities going into what we think was an old mine. This block had much new housing from mobile homes to large houses. Some of the rural houses had enormous lots. We saw both residential and commercial construction. We also observed an old mine being recycled into a shopping center at the intersection of I-70 and U.S. 40.

Agricultural covers consisted of corn, hay, and pasture.

Block 70-158 PA 71

This block is on the urbanizing edge of Pittsburgh. Parts of it are front I-79 on the Pittsburgh-Wheeling axis.

I-79 Wheeling-Pittsburgh axis. Scattered exurban housing, corn, subdivisions in semi-rural areas N of the I-79 rest stop. Cemetery, cemetery, urban.

Bridgeville exit.

Miller's Run Rd.

291 40.21.504 W80.07.740 Limestone products.

There were older businesses on H 50.

Sygan

292 40.21.320 *0.09.599 Tilled land and overview. Strip houses in rural area.

293 40.21.435 W80.09.720 Old oil derrick. Cabbages (not typical).

294 Corn and cattle, fields and trees.

294 40.21.824 W80.10.056 Forest Ridge; new rural subdivision under construction.

Old apple orchard among where once there was a farm, now it is trees.

295 40.22.428 W80.10.167 Back hoe with a new high school going up in the background. This side road had a GSA fleet management center and an Army Reserve areas.

296 40.22.527 W80.10.279 New high school. School.

277 40.22.935 W80.10.404 Two slides of Battle Ridge subdivision 1) new construction, 2) new houses.

298 40.22.872 W80.10.512 Context: wide angle with houses in the foreground and a farm in the background; 2) farm only. This shows urban edge growth in its rural context.

Block 70-158 Summary: Delorme 70

This block is on the urbanizing edge of Pittsburgh. I-79 goes through the block and Bridgeville, which Delorme shows as already urbanized, is in the block.

The north half of the block is dynamic was rapid urbanization. We observed entire subdivisions under construction as well as a new high school being built. This area was historically an agricultural area with the rural parts of the block still being farmed, but it is in the process of becoming Pittsburgh. We did not spend enough time in the block to observe the rural and agricultural parts. Instead we focused on recent activity in the north half. The agricultural covers that we observed included corn and pasture with one field of cabbages.

Block 70-156 PA 79

West, southwest of Pittsburgh.

299 40.22.181 W80.18.336 Mine reclamation in various stages. A gravel storage area.

Abandoned coal mine.

300 40.22.279 W80.19.157 Reclaimed mine: notice the coal silos on the right side.

301 40.22.176 W80.19.628 Baling hay.

302 40.21.835 W80.19.886 New house construction in rural area.

New house, pasture, two new houses, mobile

303 40.21.261 W80.19.732 Dairy cows.

Mobile

304 40.20.455 W80.19.837 Covered bridge.

305 40.20.045 W80.19.792 Old lake with a new road that went around it on the dam side. The road continued on the far side of the lake and we heard construction sounds.

Strip of rural houses north of the lake.

Low on gas

West of Cherry Valley.

Hills and woods. New house. Mostly open countryside with trees in strips.

306 40.20.994 W80.21.737 Cars, junk yard, car recycling. Farmstead. ?? grasses and pasture.

307 40.21.??? W80.21.948 Same car recycling place.

308 40.22.056 W80.20.311 New log house

To Atlasburg.

New houses. Blocks of forest.

309 40.21.468 West 80.23.412 Mine and Langeloth Molybdenum mine. For air view of the smokestack and surrounding buildings go to <http://www.langeloth.com/>. The coal mine is closed but the molybdenum mine is still operating.

P. 40.21.961 80.23.408 Another view of Langeloth. The name of the mine is apparently the Climax.

NE of Burgettstown.

310 40.23.155 W80.22.237 Sewage treatment plant (in old coal mine?).

311 40.22.926 W80.21.865 Old mine vegetation growing. There is a youth park in the old mine.

Strip mine area. A mix of older houses and new.

312 40.21.907 W80.21.904 Various stages of mine restoration with unmined trees at the top, grass below the trees, and coal mine restoration grasses below that. Part of the mine is a refuse pit. This used to be the Pennbalt Mine.

Strip of houses in the old strip mine.

Oil pump

313 40.21.885 W80.21.525 Strip houses surrounded by strip mine.

Wood chip pile in a wood waste recycling facility.

Gravel operation.

Brush along the roadside because we are driving through an old strip mine.

314 40.24.541 W80.24.480 Union Electric Steel.

315 40.25.003 W80.25.240 Mine reclamation.

316 40.24.863 W80.24.945 Oil tanks.

Block 70-156 Summary: Delorme PA 79

This block was generally stable except for large areas of mine reclamation.

There had been past mining activity in this block. We saw no evidence of current coal mining, but the Langeloth Molybdenum Climax mine is open.

There is recent and ongoing mine reclamation.

We did not have enough time to see all of this block. For example we did not go to Langeloth, but saw the mine smokestack and tailings piles from the road.

Agricultural covers consisted of mostly of hay. The area was heavily mined and most of the old mining has been invaded by deciduous trees.