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NORTHEASTERN COASTAL ZONE: 59

Field trip: August 2002

Darrell Napton, Roger Auch, Dan Sechirst, Chris Laingen

The Northeastern Coastal Zone ecoregion was in the middle of a drought during the summer of 2002. Many crops were withering, and brown yards were common.

Ideas and comments.

Individual houses in the woods were most common in the northern part of the ecoregion. Only in south (e.g. Connecticut River Valley in Connecticut) did we see many subdivisions.

Power lines are a significant landscape feature in this ecoregion.

Water supply is a significant land use in this ecoregion.

Farmer markets. Trails. State parks and locally reserved land.

We saw few real estate signs advertising land for sale.

Connecting house-barn style house (beginning with block 59-77)

Houses were generally well maintained.

Interstate and other highways were present in almost every block.

Importance of local land trusts

Not too many deer crossing signs relative to the amount of woods, perhaps because there is less edge habitat and fewer open fields than in the past.

The older, more major roads typically were continuous or near continuous strip houses.

Typically the houses were older and smaller. Newer roads and minor roads had newer houses and unfilled gaps between houses. Typically the houses were a mixture of old and new, large and small.

Sand and gravel pits were common. Glacial moraine.

Upgrading was common. One example is the new, large strip mall in an older portion of Danbury, Connecticut (lock 308, waypoint 154). This mall included a new A&P store, Walgreens, and several additional stores.

Access is a key to this region. Interstate and state highways, coastal shipping and sailing, park and ride lots, commuter rail access, ...

Public transportation was common. Many 'rural' areas and small towns had public transportation and many of the region's residents live within a short drive from New York or Boston commuter trains. Ferries also connect the mainland with various islands, including Long Island, and the larger towns have airports.

Close relationship to the sea in coastal and many noncoastal areas with fresh seafood available at local markets and restaurants. This ecoregion is on the sea-land boundary and people use the resources of each for profit and pleasure.

Congregational churches that descended from the Puritans and Baptist churches. Catholic and Episcopal churches were also common.

Cemeteries are common.

Many new post offices (growth, political power, aging facilities, new settlement pattern?)

New ice rinks.

Pockets of agriculture on selected uplands and ridgelines. This was probably associated with better and/or deeper soil. Little agriculture in the creek bottoms, possibly because of flooding from the common mill ponds and reservoirs and the strip houses associated with older transportation routes that commonly followed creek bottoms for part of their route.

Tree, shrub, and flower nursery growing fields and wholesale and retail outlets were common throughout the ecoregion.

Specialty agriculture occurred in selected pockets: sod, tobacco, cranberry.

Park and ride lots are common. They are a gravel or blacktop surface adjacent to a road and normally a short distance from a four-lane divided highway or in some cases adjacent to a commuter rail line.

Central and southern Rhode Island and southern Massachusetts are noticeably flatter than the northern portion of the ecoregion.

Trip Theme

Houses in the woods.

Sub-themes include the following:

transportation, especially interstate highways

stone fences in the woods

small scale and paucity of agriculture

Power cuts

Public water supply reservoirs and watersheds

Horticulture and farmers markets

Specialized agricultural islands: tobacco in the Connecticut River Valley, cranberry bogs in

boggy areas in the southeast, sod in areas where the demand, soil, and topography support it.

What did we not photograph?

Bed and Breakfasts, summer camps, saw mill, major employers, Dunkin' Donuts, subdivision in a clearly demarked old farm,

What unexpected things appeared?

More trees and nurseries than expected.

The high number of farm to market horticultural farms and businesses.

The ruralness of the region and the rural feeling when houses are tucked away in the woods.

Towns without traditional town centers with mini-CBDs.

High number of strip malls. Low number of major malls and Walmarts.

Low number of Mom and Pop motels.

High proportion of small lawns and lots even in new developments.

High number of septic tank cleaning services, because of the nonurban density of the rural population.

What did we expect that did was uncommon?

Real estates 'for sale' signs.

Relatively few deer and deer crossing signs and no carcasses.

How well did the ecoregion hold together?

Very well.

What land uses are unique or nearly unique to this ecoregion?

Cranberry bogs, wide-spread high density rural housing, high number of truck farms and sod farms, high number and perhaps per capita golf courses, covered tobacco farming, dependence on the defense industry, high density of Interstate and other high-speed roads and transportation, high proportion of forest cover on land that had been agriculture, number and density of large and small cities, competition between forestry and residential land uses, number of private boats and associated harbors and marinas, high density of power line cuts and power plants

What did we learn?

Main roads often have older, modest strip housing. Side roads have newer housing that varies from modest to luxurious.

This is a land of maintenance and recycling. We saw land being recycled (farm to forest to subdivision), buildings (19th century manufacturing buildings being used for new industry, office, stores, etc.), transportation corridors (often Interstate Highways, commuter rail lines, and ferries are operating parallel or in the same place as older transportation lines.

Public transportation continues to be important in this region even with the pervasiveness of automobiles and good roads.

Looking at the Land: what land uses and land covers are common?

- Forests. Logging was not particularly common. In places trees had been thinned. Most of the trees were hardwoods, though pine were common in the north and in places in the south. Most of the region converted from farming land covers to forested land covers long ago, but in places the transition has been more recent. In these areas shrubs and brush is the common land cover.
- Residences. Rural residences often consist of relatively houses on single, relatively small clearings in the woods. Mobile homes are uncommon. Rural subdivisions are less common than single house lots, but there is a regionality to this pattern; in some areas subdivisions are very common (perhaps in exceptionally high growth areas, or in areas closer to urbanized places).
- rivers, streams, and wetlands
- mill ponds,
- public water supply reservoirs that often have a forested buffer
- marinas in coastal areas
- old, often large, industrial buildings that may be abandoned or used at a lower intensity. These are generally located beside a stream or mill pond and most have small parking lots because of the high proportion of workers who walked or took public transportation to work.
- Agriculture: scattered dairies and chicken houses. Hay and corn are the most common crops. Horticultural crops and farm markets and very common. Sod, cranberries, and tobacco are important in some areas. Small, often irregularly shaped hay fields.
- Towns and cities. Rural towns often did not have a town center with traditional services. There were many older, small cities. These were normally located along a stream and are old industrial centers. Some have made the conversion to the information age and others are have a more depressed economy. These cities generally have high density residential areas and may have public transportation.

- Energy. Power line cuts and power plants were very common, because of the high number of people in the region.
- Road network. The original survey pattern was metes and bounds with its irregular sized and shaped land parcels. The roads tend to follow property boundaries which resulted in winding roads in a general spider web pattern with each web centered on a town but with the entire network complicated by roads fitting within a nested hierarchy of larger and smaller cities and towns and no regular method for road from different towns to meet. Today there is a large number of Interstate and equivalent state roads that take a higher proportion of the land area than in most other ecoregions. Commuter lots are common along hard surfaced roads near intersections with four-land highways.
- Mines. This region probably has older mines that we did not see because of road access and the heavy forest cover. We did see some sand and gravel pits.
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Other

Upgrading of infrastructure with utility trucks, digging, repair.

Pines in the north, hardwoods over most of the ecoregion with a scattering of pines, and pine areas in parts of the south.

Deteriorating rock fences were found virtually everywhere.

Farming has been in a decline. Successful farmers have specialized, generally in high value products such as dairy, fruits and vegetables, tobacco, and so forth. A close look at agriculture would probably show that some farmers have changed their operation from lower value (e.g. corn, dairy cows) to higher value (sweet corn, sod) products.

Famous People, etc.

Worcester is the birthplace of Robert Goddard. Franklin Township is home of the nation's first public library (or first free public library). John F. Kennedy, Basket Ball Hall of Fame in Springfield, Dr. Seuss in Springfield, Gilbert Stuart birthday in North Kingston, Rhode Island (Block 59-238), John Quincy and Abigail Adams in Quincy, Massachusetts.

August 17, 2002

Block 59-89

What we saw

Delorme 41. Middlesex and Essex counties.

Just north of Logan Airport. Includes Lynn, Saugus, Everett, and Revere. Highways 1A, 107, and 1/129, all major north-south roads cut through this coastal block.

What we saw. Older 3 floor, multifamily housing. Highway business strip. Closed landfill. Large Catholic Church. Beach corridor of condominiums. Drawbridge. GE aircraft engine factory.

Block Summary

This was an older urban block north of the Charles River from downtown Boston. It has traditionally had a manufacturing base. Most of the businesses and houses that we saw have

been maintained. There were several signs of buildings that had been constructed during the past 30 years to replace earlier structures. Most of the change has been urban redevelopment and upgrading. From a distance, we saw a strip of new high-rise beach condominiums. We did not have time to see the west half of the block where there was probably new infill.

Block 59-65

Skipped

August 18

Closed ski slope at Amesbury, MA

Block 59-40

What we saw

Rockingham County, New Hampshire. Delorme 22 & 29. Ten miles from Massachusetts and about 12 miles from 495. About 10 miles east of Manchester, NH.

Boutique along H 107 near Fremont Station. Housing strip along the road.

Sign about forest fires. Old Spaulding and Frost Cooperage with historical sign.

Cut logs along the road. Grange Hall. Pay pond with beach, playground equipment, etc.

Countryside Estates mobile/modular subdivision. Just down the road was Greenhill Estates, an older mobile subdivision that today looks like it could be in Appalachia.

Pine Acres family camping.

New mobile subdivision

Are these mobile home folks among those who have made the tax exodus from Massachusetts to New Hampshire?

Walmart Distribution Center at Raymond. This center is within one-half mile of H 101 a four-lane highway and is situated between I-95 and I-93 and not far N of I-495.

Large lot subdivision.

Old stone fences are common. They are not well maintained. The rocks are mostly round. Later in the day, we saw maintained fences in Massachusetts in areas where a higher proportion of the stones were flat.

The trees are not large.

Block Summary

Mixture of old and new urban uses, but mostly older. Large and small houses mixed together, which may reflect a lack of zoning. The areas that were close to the divided highways were newer and had most of the recent land use change. There was little cover difference other than the new Walmart warehouse.

Housing strip along the road. The housing pattern looks like the South, but it is much older. There were some signs of small-scale logging, but we did not see areas that appeared to have been cut or thinned.

Areas near intersections of new highways, such as where the Walmart warehouse is located, have more open space, new buildings and businesses, straight roads, and well-marked streets.

Out of Block

Hay fields, pine plantations, one even-aged stand that may have been clear cut and reseeded. Glacial ponds. Power cut. Hay, stone fences, house-barn connected, old country store that was still open. Signs about wool, but we have seen only one small herd of sheep and one llama. Five acres hayfield, our largest so far. Lots of new houses N of Northwood. Roger said that this county had many seasonal homes in the 2000 census.

Block 59-18

New Hampshire. Stratford and Belknap counties with a small corner of Merrimack county. Delorme 28, 29, and 36 & 37. Adjacent to Block 19. This is a border block. We were not able to distinguish the difference between the two ecoregions. The northwestern ecoregion was significantly higher in elevation; perhaps that was the difference. It also seemed to have more fields.

What we saw

Hay, wooded ridges, old rock fences, truck farm, abandoned barn, mobile home, scout camp, new houses, logs, oats (not harvested), horses, alfalfa/clover, pasture, corn, young trees, hayfields, cemetery, selective cutting,

Block summary

This block had much old farmland and still has significant amounts of hay. There were many new houses, but no subdivisions. The block also had some logging.

Block 59-19

Stratford County, New Hampshire. Delorme 29. Adjacent to 59-18.

What we saw

General store, garden, corn field, Baptist Church, power lines, logs, stone fences, drinking water protection area, dense rural settlement, church camp, open field with some brush, permanent grass without a fence (CRP?)

Block Summary

We spent less time in this block both because it is adjacent to block 18, but also because a road that the Delorme had shown did not connect, and we lost a significant amount of time backtracking.

This block had less rural housing. The block had no significant change. The major change is a large new power line and houses in the woods.

Out of block

Moose crossing sign, pallet making, flea market, farmers market.

We did not get a photo of the flea market. This was the only one that we saw. Flea markets are a significant land and cultural feature, but only along the major stop-in-go tourist roads. These roads were not in our samples.

Block 59-2

Cumberland County, Maine. Delorme 5. This block is on the northwest outskirts of Portland. Interstate 95 is just east of the block.

What we saw

Farm market. New grocery store, new subdivision, new office building, new subdivision in Gorham, pasture, hayfield, 3 acres for sale, brushy field, old industrial buildings along stream, prison, stable, pines, Maine State Society for the Protection of Animals complex, hay, pines, maple syrup for sale, logs and small mill, old farm land that was trees with the trees being harvested, bakery, moose crossing sign (we saw two—both today), major power line crossing, quarry, large lot subdivision, strip housing, large school less than 30 years old with temporary classrooms (more growth?), new KFC, paper plant.

Block Summary

More open block and more agriculture than our other blocks. There was evidence of some commercial forest harvesting. Most of the changes were related to new Portland area exurban housing.

Out of block

Portland, Maine National Semiconductor plant.

Block 59-77

Massachusetts, Middlesex County. Delorme page 27. This block is southwest of Nashua, west of Lowell, northeast of Fitchburg and Leominster, and almost touches the New Hampshire line.

What we saw

Stone walls, new condos in E. Pepperell, Groton Conservation Trust land, connected barn-house style of new house with the garage serving as the barn, trees 2" to 14" and a few 18" in diameter, trail for horses, hiking, and bikes; state forest, sign "Thickly Settled"; mansions; wetland; pasture with cows, new country houses, goats, old mill.

Block Summary

This block had some subdivisions in the woods and some in the open. The most common form of settlement, however, is individual houses in the woods. There were some mobile homes, but the number and proportion was less than in the South. Houses of all types and ages were generally well kept. Groton feels gentrified (Roger), and looks like Loudon County, Virginia (Dan). Where do these people work? Where does the money come from?

There were several roadside fruit and vegetable stands advertising locally grown products. Stone walls from this block south were generally larger and better maintained than to the north. The difference seemed to be whether the rocks were round or flat. Flat rocks make fence construction and maintenance much easier.

August 19

Block 59-92

Worcester County, Massachusetts. Delorme 26 & 38. Leominster is in the block which is 10 miles north of Worcester. Interstate I-190 cuts through the block north to south and highway 2 is in the north part of the block.

What we saw

I-190; real estate 'for sale' sign; tree farm, recycled cars (junk yard), construction for new subdivision, old land fill, power cut, old fort property, old sulkey rake, forested landscape. Wetland, Nashua River, product stand, corn, stone fence, housing strip, lots of overhead lines, Lancaster Conservation Commission reserved land, mixed age housing, dairy farm, pasture with cattle, new houses in the woods, new houses on old farm, orchard, palatial houses, silo, hay, sweet corn, hay land, five acres of cleared trees, field with disked weeds that may have been in wheat.

Worcester is the birthplace of rocket pioneer Robert Goddard.

Block Summary

This is an urbanized areas with many highways and lots of available land. The block land uses were mixed urban and rural; old and new; rich and moderate housing; and farm and forest. It was all tilled or pasture at one time based on the stone fences. This block has the most farmland we have yet seen with three farmsteads including an orchard. Overall the block seemed to be urban overlaid on a forest of young trees. The residences were moderate and large houses. Change: probably insignificant in percent terms. There may still be some forest becoming forest, but the increasing in housing is probably such that there has been a net loss of tree cover.

Block 59-103

Worcester County, Massachusetts. Delorme 38-39. Clinton is in this block and Worcester is about four miles to the southwest. Interstates 495 and 290 both slice through the block and intersect just beyond the eastern boundary. Part of the large Wachusett Reservoir that provides water to Boston is in the western edge part of the block.

What we saw

In Clinton, factories that now house antique stores, other retail businesses, and offices. Clinton was home to Biglow mattress. Wachusett Reservoir. Forest protecting the Wachusett Reservoir. Corn, apples, hay, new house, leveling land to prepare for new houses, horse farm, Mount Pleasant County Club golf course, a house being constructed in the woods, rural subdivision, farm market, farm market fields.

Block Summary

Boston does not clean water from the Wachusett, therefore it is imperative that the watershed be protected from land uses that might endanger the water quality. Pines (probably red pines) surround the reservoir to help meet this end.

Change: insignificant. This block had farming and nice houses. The landscape was human oriented and people have managed the land covers to cater to themselves. Construction of new

houses accounted for any recent change. Any changes were subtle in this farm/rural landscape. The land uses were catering to neighbors and amenities rather than commodities.

Out of block

Americana Financial is located in Worcester. Robert Goddard was born in Worcester.

Block 59-130

Worcester County, Massachusetts. Delorme pages 37-38 and 49-50. This block is just west of Worcester. There are two airports in this block. This is a split block with portions in the Northeastern Highlands (58).

What we saw

Anna Maria College. Old houses along Highway 122. Produce stand, large round bales (perhaps the only ones that we saw on the trip), nursery, pine plantation, Kettle Brook Reservoir Number 4, Worcester airport, pasture, rural subdivision, hayfield, stack of logs by a barn, new houses being built in the woods, many new houses between H 56 and Bond, stone fence, new reservoir (waypoint 108) that it not in the Delorme. Think recent rural settlement, Spencer Town Hall. Large farm with big grain bins and new buildings.

Block Summary

Block theme: rural new strip housing on ridge top roads. This block had thick rural, nonfarm settlement mostly built during the past 30 years. Water and water protection was also important. Water may, in fact, be the major land use in terms of importance. Agriculture was minor with a few pastures. We saw only one substantial farm that had grain bins, but saw no crop fields.

Out of Block

Genetics farm (WP 112). Church being renovated.

Block 59-164

Worcester County, Massachusetts. Delorme page 49. Interstate 90 nipped the northwest corner of this block. The block is about 4 miles west of I-395 that has direct access to Worcester, which lies only 8 miles away. Southbridge lies in the center of the block.

What we saw

Young hardwood, old carrel, environmental engineering firm, rural furniture store with three metal buildings, hay bales, new houses, pines, hay, nursery trees, rural restaurant, tree nursery, hayfield, barn, small farm pond with tractor pumping irrigation water, new houses in the woods, wetland, one-person sawmill, old barns no longer being used, well-kept stone fences, large corn field, more corn and hay, fiber imaging business, strip housing that is more than 30 years old on a 131 (a major road), glass company, building for lease, strip duplexes, old industrial buildings (American Optical Company), church.

Block Summary

This block had a considerable amount of farmland along Highway 31. The road mostly followed a ridge. Most of the farmland was devoted to hay and corn. Most of the block is wooded. Most

of the recent change is probably related to individual house construction and the associated small lawns.

Block 59-163

Worcester County, Massachusetts. Delorme page 48 -49. Interstates 84 and 90 slice through the eastern portion and northern portion of the block and meet in the northeast corner. The town is Southbridge is just east of the block. Worcester is about 12 miles away via I-90. Interstate 395, which goes through Worcester is the same distance away.

What we saw

Old strip houses and businesses (some since 1970) along Highway 131. No separation between Southbridge and Sturbridge. Motels and mall, Gemini Food Industries, I-84. Near Old Sturbridge Village there were restaurants, outlet stores, gas stations. Old Sturbridge Village is a 19th Century farming tourism village. Logs, cattle, sheep, large yard, golf course, horse stable, new houses, wetland, Hamilton Reservoir, dam, Girls Club Camp, large clover field, trail, motel.

Block Summary

This block had less agriculture and more forest than the adjacent block to the east. Agriculture consisted of some corn and hay. There was also less new housing (because of greater distance from Worcester?). Lead Mine Ridge physically dominates the block with wetlands in low places.

Recent change include some rural housing, some strip development and strip infill at the urban edge. There is a recent golf course that was likely on an old farm (WP 123). We wondered if this block was less active because of the mosquitoes associated with the numerous wetlands.

Out

In Palmer: old depot now for rent.

Block 59-176

Hampden County, Massachusetts. Delorme pages 46 and 47. One fifth of the block is east of the Connecticut River in Springfield, the rest is west of the river and includes two of Springfield's large western suburbs. The block had I- 291, I-391, and I-90.

What we saw

Springfield National Armory, now recycled into Springfield Technical Community College, a national monument, and other uses. Basketball Hall of Fame, Connecticut River, greenhouse, urban infill, old small houses, farmer market, new houses, old houses with new infill, public water shed reserved area.

Block Summary

This is an urban block. The major changes seemed to be related to urban infill and urban growth. A major land use was the Bear Hole Watershed protection area with associated forested land cover.

Out

Mine tailings, nursery, tobacco barn, cabbages, silage wagon on the road, tobacco drying, covered tobacco, abandoned tobacco barns, nursery, farmers' market.
Vegetables in a power cut just west of Somers, Connecticut.

Block 59-214

Tolland County Connecticut with a sliver of Hartford County. Delorme 54. Rockville is in the block and I-84 slices thorough the southeast corner. This block is about 20 miles northeast of Hartford.

What we saw

Corn field, Martin's produce, cucumbers, hay, and corn across the road from a subdivision. Large dairy. Corn. Dairy. Logging, new apartments, synagogue, subdivision on old farm, housing strip with farm behind it, tobacco in barns, Gasek Farms subdivision, garden maket, playground, tobacco, poles for shaded tobacco, pumpkins, dairy cows, congregational church, silos and nursery plants with new apartments across the road.

Block Summary

This block is an old specialized tobacco and dairy farming area undergoing a major transformation to rural housing. The land uses were a balance of agriculture and recent rural subdivisions. The agriculture consisted to tobacco, dairies, corn, pumpkins, and apples. Most subdivisions were constructed in the 1990s. Many subdivision are very new and some are under construction.

We did not go to the forested eastern one-half of this block.

This block had the most subdivisions of any block. Typically housing in the ecoregion consisted of houses built on single lots in the forests. Subdivisions were typically small and rare to fairly common. One difference might be that this block was not abandoned farmland land had reverted to forests, but consisted of farmland that was making a direct transformation to housing. This landscape may have been more favorable to subdivisions and less appealing to families that wanted a house in the woods and the seclusion that it might provide.

Land cover change: The cash crop is houses. Tobacco appears to be in decline. Some tobacco farmers appear to be converting to growing nursery crops.

August 20

Block 59-309

Fairfield County, Connecticut. Delorme 22 and 23 with a slice on page 31. Interstate highways 7 and 84. Part of Danbury, Connecticut and most of a neighboring town, Bethel, were in this block. This block is adjacent to block 308.

What we saw

New motels and restaurants at the I-84 exit, old large store (perhaps an old K-Mart or grocery store) was being remodeled (into Walmart, which is just not moving aggressively into New England?). Bypassed business strip (Highway 6), weedy field, strip mall, new houses, stone fences, large nursery, tiny hay fields. Reserved land in a local land trust, houses in the woods,

new house, new subdivision, houses in the woods, Congregational church, Newtown Meeting House, Episcopal church, corn, deer crossing sign (there have not been many on the trip), old farm, dairy cows, Christian church, pick-your-own orchard, sand and gravel company, nursery, DRS Power and Control Technology, hardwood logs in trailer in Danbury.

Block summary

Most of the recent land cover change in this block is from the addition of new houses. Houses in this block were a mixture of older solid middle class and some new large houses. Newtown Forest Association, a local land trust, owned land. Traditional farming was present but was not a major land use; we saw more nurseries than farms.

Block 50-308

Fairfield County, Connecticut. Delorme pages 22 and 31. Interstate Highway 84 goes through the block and most of Danbury (settled in 1685) is also in the block. This block is adjacent to block 309.

What we saw

Older residential areas in Danbury, New large strip mall in an older area, Spanish-American-Oriental grocery store, several India Indian residents, municipal buses, Spanish-American grocery, new strip mall, clearing and leveling a lot along Highway 37 (probably for commercial uses), field of grass, farmers market and nursery (that also sells clams), federal prison, old hardware store with a strip mall addition (way point 157), deer crossing sign, house on fairly large lot, Eastern Orthodox church, Church of Christ, United Methodist Church, and Bright Clouds Christian Church.

Block Summary

This urban block was mostly residential. The area had been settled longer than most other blocks and as a result had fewer new houses. It is the most urban block of the trip at this time. There were not many houses in the woods (perhaps this area was settled before that became popular or perhaps the more dense settlement precludes the wooded settlement pattern). However, we only drove the major roads in this block, a different route might have provided a different perspective of the settlement pattern.

This area hinted at the greatest ethnic diversity that we saw with several multi-ethnic grocery stores and the apparent presence of a large India Indian community.

This block had at least one street with houses and yards that were atypically large with more traditional large grass lawns. This area had a more open feel to it. The only sign of agriculture was the farmers market.

Block 59-336

Fairfield County, Connecticut. Delorme pages 19 and 21. This heavily urbanized block includes part of Stamford and Norwalk, Connecticut. Interstate 95 is in the block and I-15 is just outside to the north.

What we saw

Strip housing along Highway 106 (most houses constructed during last 30 years), golf course with a pool and tennis, housing strip along Highway 106 (some older than 30 years), greenhouse, cemetery, new post office, twin ice rinks, strip mall, old commercial street that becomes residential toward the edge of town, tick control truck, nature preserve, house in the woods, stone farm fences integrated into yards, some new/larger houses, Jaguar dealership, UPS center (missed photo), houses on the water (missed photo), big houses (missed photo), land trust, small harbor with marina and a pocket park.

Block Summary

This was a stable urban block with no agriculture. It is an old settled area with little if any change outside of redevelopment and infill. There were few new buildings, but everything was well maintained.

Out of Block

Commuter train station sign. Bridgeport appeared as depressed as I had read.

Ferry to Long Island

Ecoregion 84 Atlantic Coastal Pine Barrens 84-12 and 84-12 sliver.

Ferry from Long Island to New London

Out of block

General Dynamics Groton submarine construction facility. Coast Guard Academy in New London, Connecticut. New London Country Club.

August 21

Block 59-264

New London County, Connecticut. Delorme pages 37-38. State divided Highway 2 bisects this block which is about three miles west of Norwich and about 30 miles southeast of Hartford via Highway 2. The northwest corner of this block touches 59-248.

What we saw

New house in the woods, hardwoods, new house construction, woods that had been thinned, bedrock at the surface, hay, stone fences, houses mostly older than 30 years, Gardner Lake, cattle grazing in the forest (unique) with a good new fence, clover hayfield, very wooded area, rocky pasture, cattle, tennis court on a 'farm', leveling land for a new house, new subdivision for modular houses on old farm, trees cleared and new foundation poured, Red Cedar Lake State Park with new houses across the road, state divided Highway 2, small hay fields but no crops, maybe some rural industry, in Gilman, large lawn houses, brush cutting, bridge repair, egg farm, dairy farm, corn and hay, large dairy.

Block Summary

This block had no significant change. There was little agriculture except for on large egg farm and one large dairy. The block had a state park and was heavily forested. There was a thickly settled area near to and parallel to state Highway 2.

Out of block

Closed dairy, much corn on the flatter ridgelines and uplands, nursery, corn. The area east of Lebanon along Highway 87 was a substantial open area with agricultural including some large farms and a large, prosperous looking dairy.

Block 59-248

New London and Tolland Counties, Connecticut. Delorme 36037 and 46. The southeast corner of this block touches block 59-264. There were no four-lane roads in this block. The town of Willimantic, which seemed depressed, is just outside the block to the north. Hartford lies about 30 miles to the west via high 6 and Manchester lies about 6 miles closer. Highway 6 is a high-speed state road just to the north of the block and Highway 32 lies just to the east. The southern end of the block is about 7 miles from Colchester where divided highways 2 and 11, both divided highways, intersect and allow drivers to move rapidly in three directions.

What we saw

Strip houses approaching Willimantic. Strip Mall, hay, Lutheran church.

Out of block

Willimantic, a small, old textile town. Episcopal church, town hall, locally made Hosmer Soda (very good).

What we saw II

Woods, new houses in woods, less than ½ acre cleared for woods houses, small houses more than 50 years old, an atypical house with a large lot, deep woods, rocky pasture, new house with a blacktop drive, meadow, new post office in Columbia, new fire house in Columbia, Catholic church, power cut, older houses, hay for sale, stone fences, 30 year old houses, hay fields, new road into the forest with weeds growing up into it, horses, strip of houses build during the past 30 years, wetland (appears on the Delorme as did many of the wetlands that we photographed), several newer houses along Clubhouse Road (this area is closer to Colchester and

Block summary

This block showed signs of recent infrastructure additions in Columbia, but we did not see the growth. The block had minimal agriculture. The block seemed quiet on the north side, with a more exurban/suburban southside. The north side is close to Willimantic, an old textile town. Newer houses in the northern portion of the block dated from the 1950s to the early 1970s, which may be in indication of when Willimantic suffered from deindustrialization. South side new houses were recent.

Out of block

Lebanon: Congregational church, old meeting hall, town hall. River Ridge Golf course, farmland returning to trees, stone fence.

Block 59-266

New London County, Connecticut. Delorme pages 38-39. Two miles east of Norwich. I-395 curves around the northwest and west side of the block. The Mashantucket Pequot Reservation lies in the southern part of the block. Foxwoods Casino is located there.

What we saw

Woods, stone fence, new driveway, new house, older house, pasture, corn, farm, silage, dairy calves, new subdivision, cows, old farm, dense settlement pattern, corn, meadow, corn, dairy farm, dairy, woods, corn, modest house, farm returning to trees, corn, small subdivision, sign to a Christmas tree farm, school with large athletic field, corn field, Dunkin Donuts, Foxwoods Casino, old metal silo, Swantown Hill Rd.: Stonington Institute (probably addiction treatment) gravel road into the deep woods with solid forest stone fences and only a couple of houses, farm, hayfield, field returning to forest, new modular houses, lots of new houses, small farm with hay and pasture, corn, corn that had been cut for silage, Maple Land farms (circled on Delorme) with a large apple orchard and large tree nursery, nursery shrubs, new house, Amos Lake, farm with many greenhouses, tree farms, B&B, lots of houses on Highway 164, which lies along a strip of nonforested land.

Block Summary

Block theme: Trees and gambling.

A rural block except for Foxwoods Casino and the densely settled strip that had a combination of farming, older housing, and new housing. We may have missed lake activity in this block because we lost time by 1) taking the wrong road once, and 2) driving slowly on the poorly maintained gravel road in the woods.

Land cover change appeared to be minimal. There were some new houses. So far, there is minimal spin-off from Foxwoods (we saw one small motel off the reservation). There may be additional spin-off out of the block at the intersection of Highway 2 and Interstate 395 or at the Norwich urban edge.

Is this a retirement area? We saw several older folks doing yard work.

Block 59-268

Washington County Rhode Island. Delorme 70 and 74. Interstate 95 goes through the middle of this block, which is about 15 miles west of Narragansett Bay. The northeast corner of this block touches 59-254.

What we saw

Forests, recent houses in the woods, stone fences, weedy pasture, corn, Episcopal church, corn, mix of older and newer houses—all in the woods. Older houses were many and dense. Mill, Green Plastics, unnamed trout stream, old farm that is now a rural nonfarm, cluster of houses, house on two cleared acres, dense recent housing, Hope Valley Industries—an old wooden industrial building now used at a lower intensity but for unknown purposes, Richmond County

Club, sod farm with irrigation, new houses, level lot for new house, many bike riders, pasture, hay, newer houses that were all modest, I-95, corn, miniature golf with a large clearing in the forest, Foxwood Gold and County Club (part of the Pequot business enterprises).

Block Summary

Block theme: recreation. The block had fishing, biking, forest, golf, and the Enchanted Forest. This was a mostly forested block with houses in the woods. Many houses are probably less than 30 years old, but most were older modest houses. The new houses were also modest. Sod growing was the only agricultural enterprise.

Block 59-254

Washington County, Rhode Island. Delorme 70 and 71. This block is about five miles west of Narragansett Bay and about two miles east of I-95. The south edge of Providence is about five miles to the north. The southwest corner of this block touches 59-268.

What we saw

Woods, corn, the smallest trees we have seen, trees in an estate (a noticeable area without houses or stone fences). Out of the estate the trees are larger and there are some houses in the woods. Rhode Island seems flatter than Connecticut. Cattle in the woods, hay, houses in the woods, septic tank pumping truck, Kenyan corn grist mill and mill pond, sod farm, unknown crop (perhaps flax), sod, new houses, retail nursery, retail home and garden, Carbon Technology, logs, strip mall, some industry, paving company, veterans cemetery, molasses cane sorghum, Turf Inc., Schartner Farms an upscale farm market.

Block Summary

No change. Sod and truck farming. University of Rhode Island at West Kingston, but we did not have time to swing by the campus. The west one-half of the block was wooded with low density residential development. The south and east had cleared areas that were used for sod, fruits, and vegetables.

Block 59-238

Kent and Washington Counties, Rhode Island. Delorme 70-71 and 67. This block is adjacent to and north of 59-254 and adjacent to and west of 59-239. The northeast corner of this block is about one mile from Providence and I-95 slices through the northwest and northern part of the block. Highway 4 runs along the eastern border. The block is about five miles west of Narragansett Bay.

What we saw

Corn, wholesale nursery, country club with golf course, Baptist church and cemetery, Kingdom Hall, and Exeter Church.

Out of Block

St. Joseph Catholic Cemetery (a 40-60 acre area of grass that is surrounded by trees).

Back in Block

Sand barrens north of Division Road. This looks like the vegetation has been removed leaving sand dunes. Old mining pits in the forest across the road from the sand barrens. Closed aggregate mine south of Division Road. The sand barrens may have been affiliated. The closed mine is now part of the big River Wildlife Management Area and is used for informal recreation. In the imagery and air photo the unvegetated portions of this area may still look mined. New houses and large horse pasture just outside the Big River Wildlife Management Area. Small nursery. A small steel works in a larger old building. This business had no posted name and is probably an example of deindustrialization.

A dozen new post-1970 houses on a cul-de-sac. Deep forest. Golf (the Exeter course may be in either 59-238 or 59-254).

Wholesale nursery, golf course, golf course, small aggregate quarry, hay field, park and ride area, urban strip of residences and businesses. Nursery, Stanley Bostitch.

Block Summary

The dominant land cover is forest and the dominant land use is the Big River Wildlife Management Area that occupies 20-25% of the block. The recently mined areas, if they were mined after 1970, may make up the dominant land cover change. The eastern part of block makes a transition into urban land covers and uses with a scattering of nurseries and golf courses.

Block 59-239

Washington and Kent Counties, Rhode Island. Delorme pages 71 and 72. North Kingstown is in this block. Highway 1 bisects the block and highway 138, which crosses Narragansett Bay is two miles south. The north edge of the block abuts Providence. This block is adjacent to 59-238 and corners 59-254. An abandoned military base dominates the eastern part of the land portion of the block. Much of the block is in Narragansett Bay.

What we saw

Strip mall, Amtrak line, driving range, trailer court, older houses in the woods, upscale houses and estate (gated) properties along North Quindnesett Road, private roads, golf course, modest housing subdivision along Narragansett Bay (Mt. View).

New highway interchange at the intersection of Highways 1 and 403. Old military facility, boat, NORAD new car receiving facility on old base. Swift, a new car trucking firm. Rhode Island Economic Development Corporation on the old base.

Block Summary

Urban and forest block that was highly developed behind the coastal area. It had a mix of high end and low end housing. An abandoned military base dominates much of the coastal area. It is being redeveloped in multiple ways, from a marina to an airport, from pipe storage, to new car receiving and storage.

This area was undergoing urban redevelopment one building at a time. We saw a new 7-11 that takes twice as much land as a traditional and it had at least six gas pumps. The block had a lot of reclusive old money, and no significant agriculture.

The Mt. View subdivision had modest houses along Narragansett Bay north of the military base. This neighborhood may be in a upgrading replacement cycle with older small houses replaced by new larger houses.

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Block 59-208

Bristol County, Massachusetts. Delorme 63. Interstate Highway 195 cuts through the southwest corner of the block and then follows the southern border less than a mile outside the block. Highway 140 goes along the eastern boundary of the block. Block 59-208 is sandwiched between Fall River and New Bedford and is within commuting distance of Providence.

What we saw

Coors bottling plant, Conquerors for Christ church, industrial park by the Interstate interchange, woods, houses in the woods, new subdivision, older houses, horses, corn, sawmill, pasture, newly cleared land for a house, well company sign, no stone fences in places, landscaping businesses, corn, subdivision, corn, stone fences, farm and garden supply business, dairy, El Paso Natural Gas power plant (Dartmouth Power), farm market.

Square water body on the Delorme that showed no water in the 1992 and 2000 images. There was a construction crew working there. It looks like the area is being upgraded or being prepared to return to active use.

Cranberry bog, cranberry bog, road through the woods, open landfill (Crapo Hill), clearing in the forest for a house, old farm house that is not used for a rural nonfarm residence, cranberries, houses in the forest, dairy, cemetery, vineyard and winery, VF outlet mall near an Interstate interchange,

We were not able to obtain a view of the swampland in this block. No road cut through and this was an exceptionally dry year.

Block Summary

This block was forested, swampy, and had a relatively isolated feeling. It was not as densely settled as some blocks. The area is used, however, for urban infrastructure: Crapo Landfill, and water storage. There were new subdivisions and clearings in the forest that show some moderate land use change, but the change amount is low.

This block is making the transition from an old economy to a new as illustrated by an old hardscrabble dairy across the road from a new vineyard and winery.

This block has some land devoted to specialty agriculture with the cranberry bogs.

Beginning about a mile from I-195 exit 12 businesses became a significant land use and increased in density with closer proximity to the interchange.

Out of block

Outlet malls in old industrial buildings in Fall River. Other industrial buildings have restaurants, stores, and businesses.

Block 59-150

Worcester County, Massachusetts. Delorme 50 and 51. This block is about 10 miles southeast of Worcester, an easy commute on Highway 146 that cuts through the southwest corner of the block. Milford lies about a mile northeast of the block and it is only a five mile drive from the block to I-495 which lies east of Milford.

What we saw

Sand and gravel quarry, wetland and house, power line cut, houses along lake, new houses in woods, mill pond oriented industry along Meadow Pond, new subdivision carved out of the woods, young forest, farm and farmstead returning to woods, older modest houses, massive cemetery, strip mall with Walmart, moving earth for a new store, Blackstone River Canal Heritage State Park, modest older homes, dense settlement along roads, multiple village centers, strip businesses, canal under an old factory, wetlands in Rice City Pond.

Rice City Pond appears as a reservoir in the Delorme, but we found at least part of it had enough sediment that it had become a wetland.

Farming returning to brush (way point 308; Delorme shows open land). Young trees,

Block Summary

No agriculture

Older settled area with little change. Only one stone fence. This is an old industrial area that is in the heartland of the initial American Industrial Revolution along the Blackstone River. Today the historic river and canal corridor preserved in a state park. This block had no agriculture, perhaps because of the early transformation to industry.

Out of block

Typical duplex for industrial workers (very well maintained). Closed Draper Industry factory in Draper (closed in 1979).

Ferrucci Egg Farm—the last farm in Milford.

Block 59-152

Norfolk County, Massachusetts and Providence County, Rhode Island. Delorme: Massachusetts 51-52. This block is about five miles southeast of Milford and one mile northeast of Woonsocket.

Interstate 495 cuts through the county, I-95 lies only about 3 miles east, and I-295 is about ten miles to the south. I-495 is often considered Boston's outermost circumferential highway, and there was also a commuter line railroad that went through the block.

What we saw

Franklin Township is home of the nation's first public library (or first free public library). Container manufacturing next to Garelick Farms industry, industrial park next to I-495, Forge Park park-and-ride commuter rail line to Boston, new businesses punching holes in the forest, The Boston Group large building, large warehouse, and a new office park—all within one mile of the Unionville exit of 495.

Under construction, Grove Street Business Center. Franklin Grove Distribution Center, recent subdivision on Tobacco Road with the surviving farm buildings to one side, Bungay Brook new golf course, old open area returning to brush and some planted trees, houses taking over old

farmland, subdivision in old farm. Tilled field with farm to market crops in the background. Lots of new old fields and/or open areas in the shrub/brush stage of returning to forest. Farmers market. Hayfield that was about a acre in size then another and finally a hay field of 10-15 acres. Two large houses on private road with a mansion next door. Aggregate Industries, asphalt plant/mine combination with piles of shingles and tar paper to be recycled.

Block Summary

Dynamic with lots of LUCC change. New houses, new subdivisions, and commuter rail access along the I-495 corridor. Large scale warehouses, manufacturing plants, and subdivisions. Virtually all of the agriculture was gone, but 5-20 year old shrubs and trees hints that many fields may have been farmed during the early part of the Trends study period.

Out of Block

Bridgewater seems to be undergoing a massive transformation. New traffic lights were being installed, Bridgewater State has a new East Campus, and major roads were being upgraded.

Block 59-140

Plymouth County, Massachusetts. Delorme pages 54 and 58. Highway 3 that connects Boston with Cape Cod goes through this block. This block includes part of Kingston and is at its closest is less than a mile from the coast. This county gained more than 100,000 residents since 1970.

What we saw

Golf, strip mall, house on lake, paved trail, houses along the road, hay, pumpkins, vegetable field, self-storage, new houses in the woods, new apartments for the elderly (The Woodlands managed by Southshore Housing). Typical trees here were small pines. Kingston Trailers manufacturing plant, cranberry bog (~4ac), more cranberry bogs, retail nursery, new subdivision carved from the forest, greenhouse, pond/wetland.

We drove into a large area of roads and houses that were not mapped in the Delorme Atlas. Area east of Highway 80 in the southeast corner of the block, east of Indian Pond Road, that had massive change with several new subdivisions. Cape Cod houses, coastal evacuation route signs, new fire station at the edge of Kingston, wetland, forested wetland, sports arena with at least one ice hockey rink, driving range, recycling center, small scale wood cutting.

Block Summary

Pine trees, subdivisions, and cranberries.

Trees to houses were the major change—in some places massive, but not as large as in the last block. Agriculture was limited to farm to market crops and cranberries. With the new houses and subdivisions the block probably has less forest than in 1970.

Out of Block

Enormous saw mill.

Block 59-109

Plymouth and Norfolk Counties, Massachusetts. Delorme 53-54 and 41-42. This block is within the Boston urbanized area and includes Quincy, part of Braintree, and Weymouth. Highway 3 goes through the block I-93 is just to the west. The block includes part of Massachusetts Bay and is only about eight miles from downtown Boston. Because of darkness and rain we did not complete this block.

What we saw

Older housing, strip malls, new apartment buildings in older urbanized areas, lake, new condos, an old school (Jefferson) recycled as a day care center, new subdivision on Fort Hill, new or upgraded sewer.

New subdivision on a World War II ammunition plant. This is open area bisected by an abandoned railroad on the Delorme.

Military equipment, South Shore Country Club, large nice houses on Lincoln Street, wetland, two new strip malls at the intersection of 3A and Lincoln, new subdivision, boat storage in old military or industrial area along Weymouth Fore River, marina, new on Adams Park a cluster of strip malls, one orthogonal to the street, one parallel to the street, and in front of the one parallel to the street a discontinuous strip of fast food restaurants. Faxon Commons luxury apartments (at least six high rise buildings), Prudential Commons, a Massive development that included a Walmart and phalanxes of new apartments and condos, The Highlands at Faxon Woods.

Block Summary

This was a block of infill and upgrading.