Summary Table: Characteristics of the Ecoregions of Illinois

52. DRIFTLESS AREA

Level IV Ecoregion		Physiography		Geology	Soils			Climate			Vegetation	Land Cover and Land Use
	Area (square miles)		Elevation/ Local Relief (feet)	Surficial and Bedrock	Order (Great Group)	Common Soil Series	Temperature/ Moisture Regimes	Precipitation Mean annual (inches)	Frost Free Mean annual (days)	Mean Temperature January min-max/ July min-max (°F)		
52a. Savanna Section	283	Hills dominated by broad ridge tops; flat plateau remnants and high, mound-like erosional remnants occur. Valley bottoms are narrow. Cool, clear, perennial, spring-fed streams and a few caves occur.	800-1257/ 100-250	Thin to thick Quaternary loess, dolomitic limestone residuum, and calcareous shale residuum. Loess depth is commonly 100 to 200 inches. Ordovician and Silurian limestone, dolomite, and shale. Mounds are capped with resistant dolomite.	Uplands: Mostly Alfisols (Hapludalfs); also Mollisols (Hapludolls). Floodplains and low terraces: Entisols (Fluvaquents, Udifluvents).	On uplands: Fayette, Palsgrove, Dubuque, Lacrescent, Rozetta, Eleroy, Newglarus, Lamoille. Upland soils are derived from loess or residuum, not from glacial till, and are well-drained. On floodplains and low terraces: Wakeland, Dorchester.	Mesic/ Udic, Aquic	34-36	155-160	5-27/ 56-84	Potential natural vegetation: bluestem prairie and maple–basswood forest. On rolling uplands: in the early 19th century, dry to mesic prairies often dominated by little bluestem and side-oats grama (contained northern Great Plains plant species including plains buttercup, and June grass) and oak savanna. On mesic hill slopes: upland hardwood forest dominated by sugar maple, basswood, and red oak. On drier sites: white oak on thin, droughty, clayey residual soils, and black oak on ridge tops and rocky cliffs. On cliffs along major streams: white pine, Canada yew, and white (i.e., canoe) birch. On floodplains: forests dominated by silver maple, American elm, and green ash.	Agriculture is found on the uplands, mixed woodland-agriculture occurs in lowland areas, and forests are found on steep slopes and along streams. Pastureland is common, mixed farms and dairies occur, and woodlots are found in steepest areas. Principal crops are feed grains and forage for dairy cattle and other livestock.
52b. Paleozoic Plateau/ Coulees Section	363	Rugged, deeply dissected plateau. Hills, loess-capped river bluffs, canyons, ravines, and valleys occur, along with a few caves and springs. Includes the Niagaran Escarpment; north-facing slopes of the escarpment are steeper than south-facing slopes which are cut by narrow valleys that deepen with increasing distance from the crest of the escarpment. Cool, clear, perennial, spring-fed streams occur.	600-1100/ 200-475	Thin to thick Quaternary loess and dolomitic limestone residuum. Commonly, loess is 200 to 300 inches thick on hills and bluffs along the Mississippi River. Silurian and Ordovician limestone, dolomite, and shale. Bedrock outcrops are common along the major water courses.	Uplands: Mostly Alfisols (Hapludalfs); also, Mollisols (Hapludolls). Floodplains and low terraces: Entisols (Fluvaquents, Udifluvents) and Alfisols (Albaqualfs).	On uplands: Fayette, Dubuque, Lamont, Palsgrove, Sparta. Upland soils are derived from loess or residuum, not from glacial till, and are well-drained. On floodplains and low terraces: Wakeland, Dorchester, Zwingle.	Mesic/ Udic, Aquic	34-36	160	4-28/ 60-84	Potential natural vegetation: maple–basswood forest. On mesic upland sites: upland hardwood forest dominated by sugar maple, basswood, and red oak. On drier sites: upland hardwood forest dominated by black oak and white oak. On cliffs and in shaded ravines: white pine, Canada yew, and white (i.e., canoe) birch. On steep, southwesterly facing bluffs above the Mississippi River floodplain: loess hill prairies dominated by little bluestem and side-oats grama. On floodplains: forests dominated by silver maple, American elm, and green ash.	Mostly forest, with agriculture largely confined to level and gently sloping lowlands and hilltops. Canyons and steeper slopes are forested. The decommissioned Savanna Army Depot covers about 13,000 acres, and supports 32 endangered or threatened plants and animals. Approximately 9,400 acres have or will be transferred to the U.S. Fish and Wildlife Service's Upper Mississippi River Wildlife and Fish Refuge.

53. SOUTHEASTERN WISCONSIN TILL PLAINS

Level IV Ecoregion		Physiography		Geology	Soils			Climate			Vegetation	Land Cover and Land Use
	Area (square miles)		Elevation/ Local Relief (feet)	Surficial and Bedrock	Order (Great Group)	Common Soil Series	Temperature/ Moisture Regimes	Precipitation Mean annual (inches)	Frost Free Mean annual (days)	Mean Temperature January min-max/ July min-max (°F)		
53a. Rock River Drift Plain	609	Glaciated, nearly level to hilly till plains and outwash plains. Broad valleys occur.	700-1100/ 50-250	Quaternary glacial till, outwash deposits, thin to thick loess, residuum, and alluvium. Ordovician dolomite, limestone, and shale.	Uplands: Alfisols (Hapludalfs) and Mollisols (Argiudolls). Floodplains and low stream terraces: Mollisols (Endoaquolls, Argiudolls).	On uplands: Flagg, Tama, Pecatonica, Fayette, Ogle, Palsgrove, Ashdale, Edmund, Rockton. On floodplains and low stream terraces: Flagler, Warsaw, Comfrey, Selma.	Mesic/ Udic, Aquic	35-38	156-160	9-27/ 60-83	Potential natural vegetation: bluestem prairie, maple–basswood forest, and oak savanna. On level and rolling uplands: dry prairies (dominants: little bluestem and side-oats grama), mesic prairie (dominants: big bluestem, Indian grass, and prairie dropseed), and wet prairie (dominants: prairie cord grass, bluejoint grass, and big bluestem). In the early 19th century, forest was abundant in more dissected upland areas and along water courses. On fire protected slopes of dissected uplands: dry upland forests (dominants: black oak, white oak, bur oak, and black cherry) and mesic upland forests (dominants: sugar maple, basswood, slippery elm, and red oak). On bottomlands: floodplain forests (dominants: silver maple, black willow, cottonwood, American elm, and green ash).	Cropland, pastureland, and woodlots. More than half is used as cropland. Forage and feed grains for dairy operations and livestock farms are the primary land uses; cash-grain farming is also an important activity. Corn and soybeans are the main crops.
53b. Kettle Moraines	680	Glaciated, hummocky to hilly area with steeply sloping moraines, outwash plains, closed depressions, mounds, level areas, and many wetlands and natural lakes. The drainage network is not well integrated.	675-1050/ less than 50-150	Wisconsinan-age glacial till, outwash gravels, and thin loess (less than 20 inches). Silurian and Ordovician dolomite, limestone, and shale.	Mostly Alfisols (Hapludalfs, Epiaqualfs); also, Mollisols (Argiudolls, Endoaquolls), Histosols (Haplosaprists).	Morley, Markham, Elliott, Houghton, Nappanee, Ashkum, Marsh, Fox, Beecher, Corwin, Miami, Montmorenci, Boyer, Montgomery, Zurich, Odell, Grays, Littleton, Proctor. Poorly drained, organic soils are common in closed depressions.	Mesic/ Udic, Aquic	35-38	160-170	11-28/ 61-83	Potential natural vegetation: oak–hickory forest, oak savanna, and bluestem prairie. In the early 19th century, savanna, prairie, and, especially, forest occurred on moraines. Wetlands, including bogs, fens, seeps, sedge meadows, and marshes, were and are common. Bogs contain plants adapted to acidic conditions including leatherleaf, blueberry, cranberry, ferns, orchids, pitcher plant, sundew, winterberry, dwarf birch, and tamarack.	Forest, pastureland, and wetland. Homesites are especially common on moraines and near lakes. Ecoregion 53b is an important recreation area, and includes Chain O' Lakes.

54. CENTRAL CORN BELT PLAINS

Level IV Ecoregion		Physiography		Geology	Soils			Climate			Vegetation	Land Cover and Land Use
	Area (square miles)		Elevation/ Local Relief (feet)	Surficial and Bedrock	Order (Great Group)	Common Soil Series	Temperature/ Moisture Regimes	Precipitation Mean annual (inches)	Frost Free Mean annual (days)	Mean Temperature January min-max/ July min-max (°F)		
54a. Illinois/ Indiana Prairies	19557	Glaciated, flat to rolling plains with terminal and recessional moraines, prairie potholes, and old lake beds.	450-1000/ 25-275	Thin to thick Quaternary loess (less than 20 to more than 60 inches), Wisconsinan-age till, Illinoian-age glacial till (in the west), outwash deposits, lacustrine sediments, and alluvium. Loess is thickest downwind of major floodplains, and thins eastward. Paleozoic sedimentary rocks. Bedrock is usually deeply buried by glacial drift, but a few outcrops of sandstone occur along the larger rivers such as the Fox and Illinois.	On uplands: Mollisols (Argiudolls, Endoaquolls, Hapludolls). On floodplains and low terraces: Mollisols (Hapludolls, Endoaquolls).	On uplands: Flanagan, Catlin, Drummer, Tama, Joy, Raub, Sable, Ipava, Muscatine, Bryce, Swygert, Elliott, Ashkum, Clarence. Soils typically are high in organic content. Soils derived from loess primarily occur in the west over Illinoian till deposits. Younger soils derived primarily from drift are found in central and eastern areas on the Wisconsinan till plain. On floodplains and low terraces: Lawson, Sawmill, Radford. Natural drainage is poor.	Mesic/ Udic, Aquic	35-41	160-187	9-35/ 62-88	Potential natural vegetation: a mosaic of bluestem prairie and oak–hickory forest. In the early 19th century, mesic prairie (dominants: big bluestem, Indian grass, prairie dropseed, switch grass, and little bluestem), wet prairie (dominants: prairie cord grass, sedges, and bluejoint grass), and, on gravel moraines, kames, and loess-covered river bluffs, dry upland prairie (dominants: little bluestem and side-oats grama) were common; additionally, oak–hickory forest (dominants: black oak, white oak, and shagbark hickory) grew on dry, upper morainal slopes, and maple–oak forest (dominants: red oak, sugar maple, and American elm) were found on more mesic sites. Prairie groves contained bur oak, American elm, and hackberry, and were subjected to recurrent fires. Sycamore, silver maple, and cottonwood are native to floodplains. Bulrushes, sedges, cattails, and common reed dominated prairie potholes and marshes.	Mostly converted to cropland. Corn, soybeans, and wheat are the major crops; livestock farming is also important. Steepest land is used as pastureland or hayland. Extensive parts of the till plain have been tiled, ditched, and tied into the original drainage system to make the land suitable for cropland and settlement; in the process, poorly drained land, ponds, and swamps have been converted to agriculture. Narrow corridors of riparian forest occur. Agriculture has affected stream chemistry, turbidity, and habitat. Coal mining occurs.
54b. Chicago Lake Plain	439	Nearly level to flat, paleo-lake plain containing beach ridges, swales, sand dunes, paleo-spits, paleo-sand bars, bluffs, and both morainal and bedrock ridges. Stream dissection, relief, and slope angles are all low.	580-650/ 10-90	Quaternary lacustrine sediments, beach deposits, outwash deposits, and glacial till. Silurian sedimentary rock.	Mollisols (Endoaquolls), Entisols (Udipsamments), Alfisols (Hapludalfs).	Milford, Gilford, Oakville, Selma, Coloma, Spinks. Urban land is extensive. Very poorly- and poorly drained soils are common on flat plains.	Mesic/ Aquic, Udic	36-38	170-173. Climate is moderated by Lake Michigan.	14-31/ 63-85	Potential natural vegetation: a mosaic of bluestem prairie and oak–hickory forest. Dry prairies, mesic prairies, wet prairies, sand prairies, fens, marshes, floodplain forests, and, on sandy ridges, scrub-oak forests were common prior to settlement.	Mostly urbanized.
54c. Kankakee Marsh	11	Nearly level to depressional plain and bottomlands. The bottomlands along the Kankakee River are generally sandy, flat, and until recently, very marshy and flood-prone. Scattered low sand dunes occur.	600-650/ less than 20-50	Quaternary outwash deposits, organic material, sand flats, and alluvium. Silurian dolomite.	Mollisols (Endoaquolls, Hapludolls).	Gilford, Hoopeston. Natural drainage is very poor.	Mesic/ Aquic, Udic	37	173	13-31/ 64-85	Potential natural vegetation: a mosaic of bluestem prairie and oak–hickory forest. At the time of settlement, northern swamp forests (dominant: pin oak), wet prairies, bulrush–cattail marshes, and on scattered, low sand dunes, black oak, white oak, and sand prairies occurred.	Mostly cleared and drained for cropland; livestock farming also occurs. Corn, soybeans, and hay are the main crops. A narrow corridor of forested wetlands remains along the Kankakee River. The Kankakee River and many of its tributaries have been straightened and deepened so as to increase both their gradient and capacity. Ditches are common.
54d. Sand Area	1978	Discontinuous and low sand dunes, disjunct sandy outwash plains, discontinuous sand sheets, sandy ridges, and swales. Clear, low gradient, sand-bottomed streams occur. Summer stream flow from outwash deposits is cool and plentiful.	450-900/ less than 25-100	Quaternary windblown sand, outwash sand and gravel deposits, silty and clayey quiet water deposits, limestone residuum, and alluvium. Paleozoic shale, limestone, dolomite, and coal. Limestone outcrops are common along the Kankakee River.	Entisols (Udipsamments), Mollisols (Hapludolls, Endoaquolls, Argiudolls), Alfisols (Hapludalfs).	Oakville, Watseka, Kankakee, Plainfield, Selma, Sparta, Maumee, Gilford, Bonfield, Dakota, Onarga, Bloomfield, Hoopeston, Rockton, Plattville, Ade. On sandy ridges, very rapidly permeable, droughty soils are characteristic and are prone to wind erosion. Low-lying, depressional areas are usually poorly drained.	Mesic/ Udic, Aquic	34-38	165-182	9-33/ 62-87	Potential natural vegetation: a mosaic of bluestem prairie and oak–hickory forest. At the time of settlement, Ecoregion 54d was largely covered by prairie or mixed oak savanna. On well-drained, upland sandy sites: dry sand prairie dominated by little bluestem, fall witch grass, sand dropseed, June grass, and porcupine grass. On low dunes and sandy ridges: scrub oak forest and mixed oak savanna (dominants: black oak, blackjack oak, and white oak) and dry sand prairie. On moist or wet sites: mesic prairie (dominants: big bluestem, Indian grass, prairie dropseed, switch grass, and little bluestem), wet prairie (dominants: prairie cord grass, sedges, and bluejoint grass), or marshes (dominants: bulrushes, sedges, cattails, and common reed).	Mostly converted to cropland or used as pastureland. On sandy outwash plains, crops require irrigation from ground water-fed central pivot irrigation systems. In poorly drained areas, drainage ditches are common. On excessively drained, low nutrient dune soils: scrub forest or pastureland. Locally, vegetation that once stabilized dunes has been removed, thereby reactivating dunes. Extensive strip mining for Pennsylvanian-age coal occurs.
54e. Chiwaukee Prairie Region	52	Lake and till plains with beaches, well developed sand dunes, low beach ridges, swales, and bluffs.	580-800/ less than 10-75	Quaternary nearshore lake deposits, beach deposits, glacial till, thin loess, alluvium, outwash deposits, and colluvium. Silurian limestone, dolomite, and some shale.	Alfisols (Hapludalfs, Endoaqualfs).	Fox, Zurich, Boyer, Grays, Morley, Wauconda, Markham.	Mesic/ Udic, Aquic	34-36	170	12-29/ 61-82	Potential natural vegetation: bluestem prairie and oak savanna. Tall-grass prairies, scrub oak forests, sand prairies, sand savannas, fens, and marshes are native.	Nearly all of the natural prairie vegetation has been replaced by cropland or urban and industrial development. Some woodland remains, and is often associated with dunes. Important conservation and recreation areas occur, including Illinois Beach State Park, Illinois Beach Natural Area, and Illinois Dunes Natural Area. Ecoregion 54e is part of an important bird migration route. Its marshes are habitat for several state threatened and endangered species.
54f. Valparaiso-Wheaton Morainal Complex	1755	Glaciated, hilly, hummocky to rolling area containing moraines, kames, eskers, rolling till plains, outwash plains, kettle holes, and ravines. Drainage network is not well integrated. Small lakes and marshes are common.	550-1200/ 50-300	Wisconsinan-age glacial till and Quaternary lake deposits, thin loess (less than 20 inches), and alluvium. Ordovician and Silurian dolomite, limestone, and shale. Bedrock is generally deeply buried by glacial drift, but outcrops occur along some of the streams.	Alfisols (Epiaqualfs, Hapludalfs), Mollisols (Endoaquolls, Argiudolls), Inceptisols (Eutrudepts).	Morley, Markham, Ashkum, Frankfort, Blount, Beecher, Nappanee, Elliott, Bryce, Miami, Hennepin.	Mesic/ Aquic, Udic	34-40	160-172	11-31/ 61-85	Potential natural vegetation: a mosaic of oak–hickory forest and bluestem prairie. In the early 19th century, prairie covered slightly more than half of Ecoregion 54f. On well-drained gravel moraines: dry prairies (dominants: little bluestem and side-oats grama) and dry upland forests (dominants: bur oak and white oak). On moister uplands: mesic forests (dominants: sugar maple, basswood, red oak, and white ash). On poorly drained uplands: swamp white oak forests. In marshes: cattails, bulrushes, and common reed are native. On bottomlands: floodplain forests (dominants: silver maple, green ash, and American elm). Subsequent fire suppression has reduced the number of prairie openings, thereby increasing forest density.	Mostly growing urban and suburban developments, but wooded areas, wetlands, and pastureland are common.
54g. Rock River Hills	1878	Glaciated, mostly rolling hills and undulating plains; more rugged areas occur in the northwest and southeast, and contain ridges, ravines, and bluffs. Tributaries to the Rock River have cut narrow valleys through bedrock. Caves and springs occur.	610-1000/ 50-325	Thick Quaternary loess (more than 60 inches), thin glacial till, glacial outwash, residuum, lacustrine deposits, and alluvium. Ordovician and Silurian dolomite, limestone, and sandstone. Bedrock outcrops are common.	On uplands: Mollisols (Argiudolls, Hapludolls, Endoaquolls), Alfisols (Hapludalfs), Entisols (Quartzipsamments). On floodplains and low terraces: Mollisols (Hapludolls, Endoaquolls, Argiudolls).	On uplands: Tama, Griswold, Muscatine, Joy, Ogle, Sable, Winnebago, Fayette, Rozetta, Downs, Plano, Boone. On floodplains and low terraces: Lawson, Comfrey, Jasper.	Mesic/ Udic, Aquic	34-37	159-167	8-29/ 60-85	Potential natural vegetation: mostly a mosaic of bluestem prairie and oak–hickory forest; in the rugged northwest, maple–basswood forest. On level and rolling uplands: dry prairie (dominants: little bluestem and side-oats grama), mesic prairie (dominants: big bluestem, Indian grass and prairie dropseed), and wet prairie (dominants: prairie cord grass, bluejoint grass, and big bluestem). On slopes of dissected uplands and in fire-protected areas: dry upland forests (dominants: black oak, white oak, bur oak, and black cherry) and mesic upland forests (dominants: sugar maple, basswood, slippery elm, and red oak). On cool, north-facing bluffs: Canada yew and yellow birch. On bottomlands: floodplain forests (dominants: silver maple, black willow, cottonwood, American elm, and green ash). In marshes: cattails, bulrushes, and sedges are native.	Mostly cropland, but livestock farming is also an important land use. Forest remnants occur on steep slopes and in riparian areas. Main crops include corn, soybeans, and wheat. Field tiles are normally used for drainage.

71. INTERIOR PLATEAU

Level IV Ecoregion		Physiography		Geology	Soils			Climate			Vegetation	Land Cover and Land Use
	Area (square miles)		Elevation/ Local Relief (feet)	Surficial and Bedrock	Order (Great Group)	Common Soil Series	Temperature/ Moisture Regimes	Precipitation Mean annual (inches)	Frost Free Mean annual (days)	Mean Temperature January min-max/ July min-max (°F)		
71m. Northern Shawnee Hills	589	Largely unglaciated, rugged hills with cliffs, bluffs, ravines, and canyons. High gradient, clear streams occur, and typically have pools with rock bottoms and riffles with gravel bottoms.	360-830/ 150-450	Thin to thick Quaternary loess, residuum, colluvium, and in northernmost areas, thin and discontinuous Illinoian-age till. Pennsylvanian sandstone, siltstone, and shale. Bedrock outcrops are common.	Alfisols (Fragiudalfs, Hapludalfs), Inceptisols (Dystrudepts).	Grantsburg, Zanesville, Hosmer, Alford, Wellston, Muskingum, Berks. Fragipans occur.	Mesic/ Udic	46	185-192	21-41/ 67-89	Potential natural vegetation: oak–hickory forest. Few, if any, prairies occurred prior to settlement. Upland forests are dominated by white oak, black oak, and shagbark hickory. On dry sites: forests contain blackjack, post and scarlet oaks. In sheltered ravines: mesic forests of red oak, beech, sugar maple, tuliptree, bitternut hickory, white ash, black walnut, and basswood. On bottomlands: floodplain forests.	Mostly forest; National Forest land is extensive. Pastureland, hayland, and cropland also occur. Forestry and recreation are important land uses. Stream quality in larger streams is typically good to excellent.
71n. Southern Shawnee Hills	768	Unglaciated hills with bluffs and ravines that are characterized by many caves, sinkhole plains, sinkhole ponds, and springs. There are many clear, cold, spring-fed, perennial creeks. However, small intermittent streams that are not fed by springs also occur. Typically, pools have rock bottoms and riffles have gravel bottoms.	350-670/ 100-200	Thin to thick Quaternary loess, residuum, colluvium, and alluvium. Mississippian limestone, shale, and sandstone. Igneous intrusions and mineralized faults containing fluorspar occur in the east. Bedrock outcrops are common.	Alfisols (Fragiudalfs, Hapludalfs, Paleudalfs). On floodplains: Entisols (Fluvaquents), Inceptisols (Eutrudepts).	Hosmer, Grantsburg, Zanesville, Bedford, Baxter, Wellston. On floodplains: Wakeland, Haymond. Fragipans occur.	Mesic/ Udic	46	185-192	22-42/ 67-89	Potential natural vegetation: oak–hickory forest. Limestone glades with dry prairies (dominant: little bluestem) occurred prior to settlement. Ecoregion 71n contains flora from the Great Plains, Ozarks, Appalachians, and Mississippi Alluvial Plain. On dry uplands: forests contain blackjack oak, post oak, scarlet oak, pignut hickory, and white oak. In sheltered ravines: mesic forests composed of red oak, beech, sugar maple, tuliptree, bitternut hickory, white ash, black walnut, and basswood. On bottomlands: floodplain forests. Limestone glades are dominated by little bluestem and side-oats grama, and southern plants including wild blue sage and heart-leaved tragia. In acidic seep springs: sedges, royal fern, lady fern, cinnamon fern, and sometimes sphagnum moss.	Forest, agriculture, and many limestone glades occur. Livestock grazing, forestry, hay production, cropland agriculture, and recreation are important land uses. Corn and soybeans are the major crops. Quarries and, in the east, mines occur.

72. INTERIOR RIVER VALLEYS AND HILLS

Level IV Ecoregion		Physiography		Geology	Soils			Climate			Vegetation	Land Cover and Land Use
	Area (square miles)		Elevation/ Local Relief (feet)	Surficial and Bedrock	Order (Great Group)	Common Soil Series	Temperature/ Moisture Regimes	Precipitation Mean annual (inches)	Frost Free Mean annual (days)	Mean Temperature January min-max/ July min-max (°F)		
72a. Wabash–Ohio Bottomlands	1514	Nearly level floodplains and low terraces. Oxbow lakes, meander scars, sloughs, and scattered low dunes occur. Streams have low gradients, and silt or sand bottoms.	310-480/ less than 50	Quaternary alluvium, outwash deposits, slackwater deposits, loess, and lacustrine deposits. Bedrock outcrops are rare.	Mollisols (Hapludolls, Endoaquolls, Argiaquolls), Alfisols (Endoaqualfs, Fragiudalfs, Hapludalfs, Epiaqualfs), Inceptisols (Endoaquepts, Dystrudepts, Eutrudepts), Entisols (Fluvaquents, Udifluvents).	Armiesburg, Ginat, Zipp, Darwin, Petrolia, Wakeland, Emma, Belknap, Carmi, Sciotoville, Bonnie, Cape, Patton, Reesville, Hurst, Nolin, Shoals, Stonelick, Genesee, Disco, Westland, Titus. Poorly drained soils are common. Extensive areas have been tiled to improve drainage.	Mesic/ Aquic, Udic	42-48	187-193	19-43/ 66-89	Potential natural vegetation: mostly southern floodplain forest. On bottomlands: floodplain forests (containing: pin, bur, Shumard, cherrybark, overcup, swamp white, and swamp chestnut oaks, and sweet gum), river edge forests (dominants: black willow, cottonwood, sycamore, and silver maple), wet prairies (dominants: prairie cord grass, sedges, and bluejoint grass), and in the south near the Mississippi River, swamps (containing swamp cottonwood, Drummond's red maple, water locust, and particularly in the Cache River Basin, bald cypress and tupelo gum). In sloughs and meander scars: marshes (dominants: prairie cord grass and river bulrush). On better-drained low terrace sites: shagbark hickory and tuliptree.	Mostly cleared and drained for agriculture, but some woodlands, marshes, and swamps remain. Land use is influenced by seasonally high water tables and localized flooding. Main crops are soybeans, corn, and wheat. Livestock farming occurs. There are numerous oil and gas wells in Ecoregion 72a.
72b. Glaciated Wabash Lowlands	263	Glaciated, undulating to rolling, dissected till plain with rugged ravines, floodplains, and terraces along the Vermilion River and its tributaries. Many streams have gravel bottoms, and riffles are common.	500-700/ 25-175	Thin to thick Quaternary loess (less than 20 to 60+ inches), glacial till, outwash deposits, and alluvium. Pennsylvanian shale, sandstone, limestone, and coal.	Alfisols (Epiaqualfs, Hapludalfs), Mollisols (Endoaquolls, Argiudolls, Hapludolls).	Fincastle, Sabina, Drummer, Blount, Morley, Sable, Raub, Sawmill, Landes, Shaffton.	Mesic/ Aquic, Udic	40	184-186	17-35/ 63-87	Potential natural vegetation: oak–hickory forest, mosaic of bluestem prairie and oak–hickory forest, and beech–maple forest. In the early 19th century, prairie and dry upland forest (dominants: oaks and hickories) were found on the nearly level uplands; beech forest occurred in the mesic ravines along the Vermilion River.	Nearly level uplands have been cleared for cropland and pastureland, but forests remain in steep ravines. Main crops are corn, soybeans, wheat, and hay. Extensive surface coal mines occur.
72d. Upper Mississippi Alluvial Plain	1886	Broad floodplains and low terraces of the Mississippi River (and its major tributaries) upstream of the confluence with the Missouri River. Levees, oxbow lakes, islands, disjunct sand sheets, and scattered dunes occur. In Ecoregion 72d, the lower Illinois River is more sluggish and has more backwater lakes than the Mississippi River.	420-600/ less than 50	Quaternary alluvium, outwash deposits, and slackwater deposits. Paleozoic sedimentary rock. Bedrock is deeply covered by Quaternary sediments.	Mollisols (Hapludolls, Endoaquolls), Inceptisols (Eutrudepts).	Lawson, Darwin, Beaucoup, Titus, Genesee, Sawmill. Clayey, poorly drained soils are common. but loamy, moderately well-drained or well-drained soils occur.	Mesic/ Aquic, Udic	35-39	162-188	7-36/ 60-88	Potential natural vegetation: oak–hickory forest. Native on floodplains: bottomland forests (dominants: silver maple, American elm, and green ash with pin oak, pecan, bur oak, sycamore, honey locust, hickories, and black walnut), mesic prairies (dominants: big bluestem, Indian grass, prairie dropseed, switch grass, and little bluestem), wet prairies (dominants: prairie cord grass, sedges, and bluejoint grass), and marshes (dominants: river bulrush and cattail). Native on sand sheets: dry prairie (dominants: little bluestem, fall witch grass, sand dropseed, June grass, and porcupine grass). Native on low dunes: scrub oak forest.	Mostly cleared for agriculture, but scattered forest remnants occur especially on islands and inside of levees. Nearly all of the original prairies have been drained and converted to agriculture. Main crops are corn and soybeans. The Mississippi River has been extensively channelized, and numerous low dams with locks have been constructed.
72e. Middle Mississippi Alluvial Plain	654	Broad floodplains and low terraces of the Mississippi River. Levees, oxbow lakes, islands, spring-fed swamps, disjunct sand sheets, and scattered dunes occur. Bottomlands are broad and were partly formed by glacial flood waters. Characteristically, this part of the Mississippi River downstream of the Missouri River and upstream of Thebes Gorge is very muddy.	350-420/ less than 50	Quaternary alluvial, outwash, and slackwater deposits. Paleozoic sedimentary rock. Bedrock is deeply covered by Quaternary sediments.	Mollisols (Hapludolls, Endoaquolls), Inceptisols (Endoaquepts).	Lawson, Beaucoup, Darwin, Karnak, Ware, Medway, Cairo. Clayey, poorly drained soils are common. but loamy or sandy, moderately well-drained to well-drained soils occur.	Mesic/ Aquic, Udic	39-47	188-193	19-41/ 67-91	Potential natural vegetation: oak–hickory forest. Prior to settlement, species-rich bottomland forests, wet prairies (dominants: prairie cord grass, sedges, and bluejoint grass), mesic prairies (dominants: big bluestem, Indian grass, prairie dropseed, little bluestem, and switch grass), marshes (dominants: river bulrush, cattail, pickerelweed, and American lotus), and bottomland swamps were common. On clay-rich floodplain soils: bottomland forests (dominants: pin oak, overcup oak, Shumard oak, and cherrybark oak) and, in the south, bottomland swamps (dominants: pumpkin ash, swamp cottonwood, Drummond's red maple, and water locust). On sandy soils of floodplains: bottomland forests (dominants: silver maple, ashes, American elm, honey locust, sugarberry, and pecan). On loamy soils in the south: beech, basswood, and red buckeye.	Nearly all of the original forests, prairies, and marshes have been drained and converted to cropland or pastureland. Main crops are soybeans, corn, and wheat. Both the alluvial plain and the river channel have been significantly modified in the last 100 years.
72f. River Hills	2815	Hills, bluffs, cliffs, and ravines flanking the Mississippi, lower Illinois and lower Sangamon rivers. Ecoregion 72f is mostly glaciated, rugged, and dissected. Areas of karst occur. Caves and sinkhole ponds are most abundant in the unglaciated areas of Calhoun County.	425-800/ 50-375	Thick Quaternary loess (more than 60 inches) and glacial till (mostly pre-Wisconsinan-age). Paleozoic sedimentary rocks dominated by limestone and sandstone. Bedrock outcrops are common in the bluffs and cliffs.	Alfisols (Hapludalfs, Endoaqualfs).	Seaton, Fayette, Stronghurst, Rozetta, Hickory, Clarksdale.	Mesic/ Udic, Aquic	36-39	169-185	13-37/ 63-87	Potential natural vegetation: mostly oak–hickory forest; also a mosaic of bluestem prairie and oak–hickory forest. On dry sites: forests (dominants: black oak and white oak). On mesic sites: forests (dominants: sugar maple, basswood, red oak, hackberry, slippery elm, and black walnut). On and near ridge tops: post oak. On bottomlands along streams: floodplain forests (dominants: silver maple, hickories, cottonwood, and sycamore). On steep slopes and loess-covered bluff tops: hill prairies (dominants: little bluestem and side-oats grama).	Mostly forest. National Forest land is extensive. Wooded valleys are important roosting area for wintering bald eagles. Ecoregion 72f is part of an important, forested habitat corridor along the Mississippi River.
72g. Southern Ozarkian River Bluffs	212	Mostly unglaciated, rugged bluffs and ravines along the Mississippi River.	320-1000/ 100-680	Thin to thick Quaternary loess, colluvium, residuum, and alluvium. Paleozoic cherty limestone, dolomite, and shale. Bedrock outcrops are common in bluffs and ravines. Ecoregion 72g is driftless and mostly unglaciated; however, the ecoregion's northern tip was covered by Illinoian ice.	Alfisols (Paleudalfs, Hapludalfs).	Goss, Alford, Baxter. On steep bluffs, soils are thin and developed from thin loess or acidic residuum and colluvium. On bluff tops, soils have developed from thick loess.	Mesic/ Udic	45-47	192-193	21-43/ 67-89	Potential natural vegetation: mostly oak–hickory forest. On uplands: extensive, species-rich forests with red oak, white oak, black oak, sugar maple, bitternut hickory, and basswood. On steep, cherty slopes: flora tolerant of acidic soil conditions (e.g., azalea, shortleaf pine, and farkleberry). On bottomlands: floodplain forests (with white oak, red oak, sycamore, American elm, river birch, and cottonwood). On loess-covered bluff tops and some slopes: scattered loess hill prairies (dominants: little bluestem and side-oats grama).	Mostly forest; also scattered loess hill prairies, and peach and apple orchards. Forestry and recreation are primary land uses. Ecoregion 72g is part of an important, forested habitat corridor along the Mississippi River.
72i. Western Dissected Illinoian Till Plain	6946	Glaciated, dissected till plain with broad, nearly level interfluves, ravines, and floodplains. Stream gradients are greater in the northern part of Ecoregion 72i than in the southern portion.	490-820/ 50-200. Relief is greater in the north than in the south.	Thick Quaternary loess (more than 60 inches) and pre-Wisconsinan-age glacial till. Pennsylvanian and Mississippian limestone, sandstone, shale, and coal. Bedrock outcrops are common in the valleys and ravines.	On uplands: Mostly Alfisols (Hapludalfs, Endoaqualfs); also Mollisols (Argiudolls, Argiaquolls, Endoaquolls).	Clay, Harrison, Clinton, Rozetta, Hickory, Herrick, Keomah, Ipava, Tama, Virden, Muscatine, Sable. Prairie soils are high in organic matter and developed in several feet of loess. Sheet erosion can be severe on cultivated slopes.	Mesic/ Udic, Aquic	36-39	170-187	11-36/ 63-88	Potential natural vegetation: mostly oak–hickory forest; also a mosaic of bluestem prairie and oak–hickory forest. On well-drained slopes in dissected areas: forests (dominants: black oak, white oak, and shagbark hickory). On more mesic slopes: forests (dominants: white oak, red oak, and basswood). On broad, near level interfluves such as near Carthage, Bushnell, and Carrollton: extensive prairie (dominants: big bluestem, Indian grass, prairie dropseed, and switch grass). On fine textured soils and on prairie margins: post oak and blackjack oak. On bottomlands of major streams: floodplain forests (dominants: silver maple, American elm, ashes, and box elder). Marshes and wet prairie occurred.	Forest and agriculture. Slopes and ravines remain mostly wooded. Nearly level interfluves, that were once covered by prairie, are now used as cropland or livestock farms. Main crops are corn and soybeans. Strip mining for coal occurs locally.
72j. Southern Illinoian Till Plain	11577	Glaciated, partly dissected, flat to rolling till plains that become more hilly to the south, where bedrock is closer to the surface. Low Illinoian-age moraines occur. Major streams have broad floodplains.	380-800/ 10-100	Thin to thick Quaternary loess (10-60 inches), Illinoian-age glacial till, and alluvium. Paleozoic (mostly Pennsylvanian) sandstone, limestone, coal, and shale. Bedrock is near the surface in the south.	On uplands especially in the north: Alfisols (Hapludalfs, Albaqualfs, Natraqualfs, Natrudalfs, Endoaqualfs). Uplands especially in the south and on side slopes and some flats in the north: Alfisols (Fragiudalfs, Endoaqualfs, Albaqualfs). On floodplains and low terraces: Mollisols (Hapludolls, Endoaquolls), Inceptisols (Eutrudepts, Endoaquepts), Entisols (Fluvaquents).	Uplands especially in the north: Hoyleton, Cisne, Huey, Darmstadt, Oconee, Cowden, Piasa; clayey, slowly- and very slowly-permeable soils are common. Impervious fragipans and claypans occur. Uplands especially in the south and on side slopes and some flats in the north: Ava, Bluford, Wynoose. Impervious fragipans occur. On floodplains and low terraces: Lawson, Beaucoup, Darwin, Haymond, Belknap, Wakeland, Petrolia. Nearly all of the flat uplands are now tiled to improve drainage.	Mesic/ Aquic, Udic	39-45	187-192	17-40/ 65-88	Potential natural vegetation: mostly oak–hickory forest; also a mosaic of bluestem prairie and oak–hickory forest. Prior to settlement, both forest and prairie were present. On better-drained, nearly level uplands: forests (containing black oak, shingle oak, mockernut hickory, and shagbark hickory) and mesic tall-grass prairie (dominants: big bluestem, Indian grass, prairie dropseed, switch grass, and little bluestem). On nearly level, clay-rich soils of poorly drained uplands: flatwood forests (containing post oak, swamp white oak, blackjack oak, and pin oak). On relatively dry south- and west-facing valley slopes: forests (dominants: white oak, shingle oak, and black oak). On more mesic valley slopes: forests (containing hickories, white ash, basswood, sugar maple, black cherry, slippery elm, black walnut, and oaks). On morainal ridges: mesic forests (containing red oak, elm, walnut, and basswood). On the broad bottomlands of the Kaskaskia River: floodplain forests (dominants: silver maple, willows, sycamore, and American elm) and some wet prairie (dominants: prairie cord grass, sedges, and bluejoint grass). On bottomlands of smaller streams: floodplain forests (dominants: pin oak and shingle oak with white oak, red oak, hickories, black walnut, river birch, and cottonwood). Marshes were associated with the stream floodplains.	Agriculture and forest. Nearly all of the flat land has been converted to cropland or pastureland. Forests are now concentrated in areas unsuited to farming, such as steep slopes, ravines, and riparian areas. Main crops are soybeans, corn, and wheat. Extensive parts of the till plain have been tiled, ditched, and tied into the original drainage system to make the land suitable for cropland and settlement.
72k. Cretaceous Hills	233	Unglaciated, rolling hills.	310-560/ 50-250	Thin to thick Quaternary loess, residuum, colluvium, and alluvium. Unconsolidated Cretaceous and Tertiary sand, gravel, and silt.	Alfisols (Fragiudalfs, Hapludalfs), Ultisols (Fragiudults).	Hosmer, Lax, Alford, Stoy. Fragipans occur.	Predominantly Mesic/ Udic	47-48	190-192	24-42/ 68-89	Potential natural vegetation: mostly oak–hickory forest. Prior to settlement, forests were extensive, but some mesic prairies occurred on wide stream bottoms and dry prairie were found on eastern uplands. On uplands: forest (black oak, white oak, red oak, cherrybark oak, black gum, tuliptree, shagbark hickory, pignut hickory, and, in the west, beech are common). On broad stream bottoms: mesic prairies (dominants: big bluestem, Indian grass, and gama grass).	Agriculture and forest. Steep slopes remain mostly wooded. Elsewhere, land has been converted to livestock farms, cropland, and general farms. Main crops are corn, wheat, hay and soybeans.
72l. Karstic Northern Ozarkian River Bluffs	361	Partly glaciated, bluffs and ravines along the Mississippi River with well developed karst, including numerous caves, sinkholes, sinkhole ponds, and springs.	400-760/ 50-350	Thick Quaternary loess (more than 60 inches) and some Illinoian-age till. Mississippian limestone, sandstone, and siltstone.	Alfisols (Hapludalfs). Most soils developed from thick loess, but on steep river bluffs, thin soils have developed from residuum.	Alford, Menfro, Westmore, Neotoma.	Mesic/ Udic	40-45	189-192	21-40/ 67-91	Potential natural vegetation: mostly oak–hickory forest; also a mosaic of bluestem prairie and oak–hickory forest. Prior to settlement, forests were extensive, and loess hill prairies were common on loess-covered bluff tops and steep slopes. On ridge tops: forests (dominants: white oak, black oak, and hickories). On more mesic sites: forests (dominants: red oak, sugar maple, basswood, and Ohio buckeye). On bottomlands of streams: floodplain forests (containing white oak, red oak, sycamore, American elm, river birch, and cottonwood). On steep slopes and loess-covered bluff tops: loess hill prairies (dominants: little bluestem and side-oats grama).	Forest and agriculture. Steep slopes remain mostly wooded. Elsewhere, the land has been converted to pastureland, cropland, and orchards. Main crops are corn, wheat, soybeans, hay, apples, and peaches. Ecoregion 72l is part of an important, forested habitat corridor along the Mississippi River.
72m. Wabash River Bluffs and Low Hills	749	Low bluffs along the Wabash River.	400-700/ less than 50-100	Thick Quaternary loess (mostly more than 60 inches), outwash material, and Illinoian-age glacial till. Mostly Pennsylvanian limestone; also sandstone, shale, and coal. Bedrock outcrops sometimes occur in the river bluffs and stream cuts.	Alfisols (Fragiudalfs, Hapludalfs, Endoaqualfs).	Hosmer, Stoy, Hickory, Weir. Fragipans occur.	Mesic/ Udic, Aquic	40-46	187-190	19-41/ 66-89	Potential natural vegetation: mostly oak–hickory forest; also a mosaic of bluestem prairie and oak–hickory forest. Prior to settlement, dry upland forests (dominants: black oak and hickories), mesic upland forests (dominants: white oak, red oak, and sugar maple), floodplain forests (dominants: silver maple, cottonwood, willows, sycamore, and American elm), and limited amounts of mesic prairie (dominants: big bluestem, Indian grass, prairie dropseed, switch grass, and little bluestem) occurred.	Forest and agriculture. Steep slopes and ravines remain mostly wooded. Elsewhere cropland and livestock farming occur. Main crops are corn, wheat, soybeans, and hay.

73. MISSISSIPPI ALLUVIAL PLAIN

Level IV Ecoregion		Physiography		Geology	Soils			Climate			Vegetation	Land Cover and Land Use
	Area (square miles)		Elevation/ Local Relief (feet)	Surficial and Bedrock	Order (Great Group)	Common Soil Series	Temperature/ Moisture Regimes	Precipitation Mean annual (inches)	Frost Free Mean annual (days)	Mean Temperature January min-max/ July min-max (°F)		
73a. Northern Holocene Meander Belts	109	Unglaciated, broad floodplains, low terraces, islands, and meander belts. Swales, abandoned channels, oxbow lakes, sloughs, natural levees, and point bars occur.	300-340/ 0-25	Quaternary alluvium.	Inceptisols (Endoaquepts), Mollisols (Endoaquolls), Entisols (Fluvaquents).	Karnak, Jacob, Cairo, Belknap, Bonnie. Clayey, poorly- and very poorly drained soils are common and naturally fertile.	Predominantly Mesic/ Aquic	47	193	24-42/ 68-89	Potential natural vegetation: southern floodplain forest. Prior to settlement, bottomland forests and bottomland swamps were extensive. On clay-rich soils of floodplains: species-rich bottomland forests (containing Shumard oak, cherrybark oak, swamp white oak, swamp chestnut oak, pin oak, overcup oak, kingnut hickory, shagbark hickory, bitternut hickory, ashes, sweet gum, black gum, honey locust, sugarberry, pecan, black cherry, and catalpa). On coarser-textured floodplain soils with less impaired drainage: bottomland forests (containing beech, tuliptree, and cucumber tree). In areas subject to frequent or prolonged flooding: bottomland swamps (containing bald cypress and tupelo gum).	Nearly completely cleared and drained for agriculture; only scattered, bottomland forests and swamps remain on islands, oxbows, insides of levees, and, especially, in conservation areas. Cropland is now widespread. Main crops are soybeans, corn, and wheat. Livestock farming also occurs. Land use in undrained areas is influenced by seasonal flooding.

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