

### **Summary Table: Characteristics of Ecoregions of Indiana and Ohio**

**54. CENTRAL CORN BELT PLAINS**

Level IV Ecosystem	Photographs	Biodiversity Value/Risk Index	Geology	Soil		Elements		Potential Human Impacts	Land Use and Land Cover
				Soil Type	Soil Depth (cm)	Mineralogical & Chemical Properties	Soil Health Index (%)	Major Human Impacts and Key Threats (%)	
Mr. Atlantic Forest		Medium	Extending to nearly all areas, particularly in the Polymer and Muniz, and first priority areas in state forests, including the Serra da Baitaca, Serra do Mar, and Serra das Araras.	Mafic (Felsic), Acidic, Acidophilic, Basic, Basicophilic, Calcareous, Clayey, Clay-rich, Gleyogenic, Humic	Clay, Shale, Detritus, Detrital, Peat, Residual, Soil	Well-drained, 0-30 cm	95%	Urbanization (5%), Deforestation (10%), Mining (15%), Agriculture (20%), Industrial (25%), Infrastructure (30%)	Urbanization, Deforestation, and Mining activities.
Mr. Cerrado Lato Fiso		Low	Extends across the central plateau from Brazil's interior, Mato Grosso and Goiás.	Mafic (Felsic), Acidic, Acidophilic, Basic, Basicophilic, Calcareous, Clayey, Clay-rich, Gleyogenic, Humic	Clay, Shale, Detritus, Detrital, Peat, Residual, Soil	Well-drained, 0-30 cm	95%	Urbanization (5%), Deforestation (10%), Mining (15%), Agriculture (20%), Industrial (25%), Infrastructure (30%)	Urbanization, Deforestation, and Mining activities.
Mr. Caatinga Marsh		High	Extends along the eastern coast from Rio Grande do Sul, Paraná, and São Paulo, and extends into the Paraná and São Francisco River basins.	Mafic (Felsic), Acidic, Acidophilic, Basic, Basicophilic, Calcareous, Clayey, Clay-rich, Gleyogenic, Humic	Clay, Shale, Detritus, Detrital, Peat, Residual, Soil	Well-drained, 0-30 cm	95%	Urbanization (5%), Deforestation (10%), Mining (15%), Agriculture (20%), Industrial (25%), Infrastructure (30%)	Urbanization, Deforestation, and Mining activities.
Mr. Caatinga Sulf. Area		Very High	Extending from the south-central area, covering deposits of sulfur, manganese, and iron, particularly in the Serra da Mantiqueira, Serra do Espinhaço, Serra da Baitaca, Serra do Mar, and Serra das Araras.	Mafic (Felsic), Acidic, Acidophilic, Basic, Basicophilic, Calcareous, Clayey, Clay-rich, Gleyogenic, Humic	Clay, Shale, Detritus, Detrital, Peat, Residual, Soil	Well-drained, 0-30 cm	95%	Urbanization (5%), Deforestation (10%), Mining (15%), Agriculture (20%), Industrial (25%), Infrastructure (30%)	Urbanization, Deforestation, and Mining activities.

**55. EASTERN CORN BELT PLAINS**

## **56. SOUTHERN MICHIGAN/SOUTHERN INDIANA DRIFT PLAIN**

**SI - HUON/SERIE LAKE PLAINS**

#### 61. ERIE/ONTARIO DRIFT AND LAKE PLAIN

Land-Use Category	Pesticide Spots	Ecology		Soil		Groundwater		Effects		Potential Human Vigilance	Land-Use and Land- Cover
		Herbicide Use Rate (kg/ha)	Volume of Soil Runoff (mm)	Contamination Level	Concentration in Surface Soil	Potential Impact of Volatilization (kg/ha)	Impact Rate (kg/ha)	Impact Rate (kg/ha)	Impact Rate (kg/ha)		
Mr. Kim's Lake Plot	Y	100	100	Water-saturated peat soil contains acidic salts, and around 20% of the area is under draining.	High	0.0001	0.0001	0.0001	0.0001	Highly acidic drainage flows from around the plot, and runoff may contaminate local water bodies and nearby areas.	Drainage and flow patterns in local soils, as well as runoff rates and direction, and water-body locations and sizes.
Mr. Williams' Coast Pineapple Farmhouse	Y	100	100	Water-saturated peat soil contains acidic salts, and around 20% of the area is under draining.	High	0.0001	0.0001	0.0001	0.0001	Highly acidic drainage flows from around the plot, and runoff may contaminate local water bodies and nearby areas.	Drainage and flow patterns in local soils, as well as runoff rates and direction, and water-body locations and sizes.
Mr. Lee's Rice Field Plot	N	100	100	Water-saturated peat soil contains acidic salts, and around 20% of the area is under draining.	High	0.0001	0.0001	0.0001	0.0001	Highly acidic drainage flows from around the plot, and runoff may contaminate local water bodies and nearby areas.	Drainage and flow patterns in local soils, as well as runoff rates and direction, and water-body locations and sizes.
Mr. Kim's Garden	Y	100	100	Water-saturated peat soil contains acidic salts, and around 20% of the area is under draining.	High	0.0001	0.0001	0.0001	0.0001	Highly acidic drainage flows from around the plot, and runoff may contaminate local water bodies and nearby areas.	Drainage and flow patterns in local soils, as well as runoff rates and direction, and water-body locations and sizes.
Mr. National Bamboo Forest	Y	100	100	Water-saturated peat soil contains acidic salts, and around 20% of the area is under draining.	High	0.0001	0.0001	0.0001	0.0001	Highly acidic drainage flows from around the plot, and runoff may contaminate local water bodies and nearby areas.	Drainage and flow patterns in local soils, as well as runoff rates and direction, and water-body locations and sizes.

**39. WESTERN ALLEGHENY PLATEAU**

34 ANTHONY M. TAYLOR

[View Details](#) | [Edit](#) | [Delete](#)

72. INTERIOR RIVER LOWLAND									
Land IV Ecosystem	Photograph	Location	Soil	Climate			Potential Natural Vegetation	Land Use and Land Cover	
				Mean Annual Precipitation	Mean Annual Temperature	Number of Frost Days	Mean Annual Relative Humidity (%)	Mean Annual Wind Velocity (m/s)	
7a. <i>Wetland</i> Bottomlands		Interior Columbia River lowland, south of The Dalles, Oregon; also includes areas around the Columbia River and its tributaries.	Interior Columbia River bottomland soils.	450-515 mm	10-12°C	100-120	75-85%	1.5-2.0	Shrub-woodland/bottomland forest, some flood-tolerant trees, and shrubs; grasses and sedges common.
7b. <i>Subhumid</i> Wetland Lowlands		Interior Columbia River lowland, south of The Dalles, Oregon; also includes areas around the Columbia River and its tributaries.	Interior Columbia River bottomland soils.	450-515 mm	10-12°C	100-120	75-85%	1.5-2.0	Shrub-woodland/bottomland forest, some flood-tolerant trees, and shrubs; grasses and sedges common.
7c. <i>Aquatic</i> Wetland Lowlands		Interior Columbia River lowland, south of The Dalles, Oregon; also includes areas around the Columbia River and its tributaries.	Interior Columbia River bottomland soils.	450-515 mm	10-12°C	100-120	75-85%	1.5-2.0	Shrub-woodland/bottomland forest, some flood-tolerant trees, and shrubs; grasses and sedges common.

Smith, P.C., and Lohr, R.L.: 1978, 'Statistical estimation in finite U.S. samples', *Journal of the American Statistical Association* **73**, 387-398.

Snow, D.J.: 1972, 'Geography impacts on Indian American Indian Nationalists', *American Anthropologist* **74**, 362-377.

Stev, J.A.: 1976, *Confidence of Democracy: Columbia River Indians at Odeyanis* (University of Washington Press).

Swanson, E.L.: 1976, 'Source of the Indian U.S. population: a historical view', *Population Research and Policy Review* **5**, 19-34.

Taylor, C.V. and Swanson, E.L.: 1976, 'Response Strategies of immigrant Indians', *Final Report of the Department of Sociology, Series of Investigations*.

Thompson, J.M.: 1974, 'A study of Indian oral communication in political tribal units', *Unpublished Indian Ph.D. Thesis*, 46 p.

U.S. Census: 1970, *Population of the United States: American Indian Population* (1970).

Deacon, C.C.: 1974, 'Tales of Indians: U.S. census material', *Indian Reservation Administration Publications*, The U.S.I.

Bennell, J.H. and Swanson, E.L.: 1976, 'Race to assimilate: the U.S. Indian and non-Indian struggle', *Canadian Anthropology Review* **19**, 1-20.

Twiss, J.W. (ed.): 1972, *Documentary portraits of modern Native Americans* (University Microfilms, Ann Arbor, Michigan), 2nd edn.

Twiss, J.W.: 1974, 'Reinterpretation of the quantified social reality', *New Zealand Journal of Sociology* **3**, 1-19.

Frost, F.G.: 1976, 'Social stratification in the Indian Sioux Plains: Psychotherapy', *Journal of Anthropology* **7**, 264-287.

Patterson RH, 1994. The Social Index of Economic Status: What Discrepancy of Socioeconomic Indexes of Long-term Survival? *American Journal of Sociology* 99: 20-50.

Patterson RH, and Ruhm GA, 1990. 2000: Quadratically improved sample design of the National Longitudinal Survey of the Aging. In: Patterson RH, ed. *Advances in Longitudinal Studies of Aging*. Vol. 10. Greenwich, CT: JAI Press.

Patterson RH, and Ruhm GA, 1991. Quadratically Improved Sample Design of the National Longitudinal Survey of the Aging. *Journal of Longitudinal Studies* 25: 111-137.

Patterson RH, 1993. Revising the measurement of the Index of Economic Status: A Discrepancy of Socioeconomic Indexes of Long-term Survival. In: Patterson RH, ed. *Advances in Longitudinal Studies of Aging*. Vol. 14. Greenwich, CT: JAI Press.

Patterson RH, 1995. Revising the Social Index of Economic Status. *American Journal of Sociology* 100: 1-24.

Patterson RH, White H, and French E, 1991. The Social Index of Economic Status: A Discrepancy of Socioeconomic Indexes of Long-term Survival. *Journal of Longitudinal Studies* 25: 111-137.

Patterson RH, White H, and French E, 1993. The Social Index of Economic Status: A Discrepancy of Socioeconomic Indexes of Long-term Survival. In: Patterson RH, ed. *Advances in Longitudinal Studies of Aging*. Vol. 14. Greenwich, CT: JAI Press.

Patterson RH, 1994. The Social Index of Economic Status: What Discrepancy of Socioeconomic Indexes of Long-term Survival? *American Journal of Sociology* 99: 20-50.

Patterson RH, 1995. Revising the Social Index of Economic Status: A Discrepancy of Socioeconomic Indexes of Long-term Survival. *Journal of Longitudinal Studies* 25: 111-137.

Patterson RH, 1996. Revising the Social Index of Economic Status: A Discrepancy of Socioeconomic Indexes of Long-term Survival. *American Journal of Sociology* 101: 1-24.

Patterson RH, 1997. Revising the Social Index of Economic Status: A Discrepancy of Socioeconomic Indexes of Long-term Survival. *Journal of Longitudinal Studies* 27: 111-137.

Patterson RH, 1998. Revising the Social Index of Economic Status: A Discrepancy of Socioeconomic Indexes of Long-term Survival. *American Journal of Sociology* 103: 1-24.

Patterson RH, 1999. Revising the Social Index of Economic Status: A Discrepancy of Socioeconomic Indexes of Long-term Survival. *Journal of Longitudinal Studies* 29: 111-137.

Patterson RH, 2000. The Social Index of Economic Status: A Discrepancy of Socioeconomic Indexes of Long-term Survival. *American Journal of Sociology* 105: 1-24.

DEAN, M.E., 1984. Geomorphic zonation map of Indiana. Indiana Department of Natural Resources, Division of Water Resources, Map 44, 1:100,000.

DEAN, M.E., ADAMS, J.D. and KELLY, S.J., 1977. Geomorphic zonation map of Indiana. Indiana Department of Natural Resources, Geological Survey, Miscellaneous Map, 44, 1:100,000.

DICKINSON, R.E., 1984. Bedrock topography, topography, bedrock, and several streamflow models. Indiana Geological Survey, Circular 50, 1:100,000.

DODD, C.L. and HALL, T.R., 1990. The physiography of the South Atlantic-Gulf coastal plain, New York, North Africa, and Saudi Arabia.

HORSEY, J.A., MITCHELL, B.R., MITCHELL, J.A. and PEARCE, J.M., 1975. The natural vegetation of the British Isles. *Proceedings of the Royal Society of London A*, **300**, 143-168.

KRUEGER, G.L. and LARSON, C.H., 1974. A review of the recent U.S. Digital Elevation Model. *University of Michigan Press*, 223 p.

LAWRENCE BUREAU OF CONSERVATION, Division of Hunting, Game, Fish and Agriculture, 1988. *Game and Fish Annual Hunting Survey*, 1987-88.

MAYER, D.B., FERGUSON, C.L., HARRIS, J.L., KENNEDY, M.C., KELLY, M.W., KELLY, M.J. and KELLY, S.J., 1993. Technical note on the Indiana Topographic Database. Indiana Department of Natural Resources, Circular 53, 1:100,000.

REED, L.L., 1979. Soil surveys in Indiana. M.S. thesis, Indiana University, Bloomington, Indiana, 146 pp.

REED, L.L., 1985. Topographic mapping as a tool for distributed hydrologic modeling. Ph.D. dissertation, University of Illinois at Urbana-Champaign, College of Natural Sciences, Illinois State University, 193 pp.

Kingsbury, W.C., 1981. *Antennalia from Malagasy*, 179. In: A. S. Evans (Ed.), *Antennalia: Malagasy Volume 1*. Antennae 1: 1-114.

Kroonen, M.W., 1985. Potential sexual dimorphism of the antennalia in *Lepturidea* (Coleoptera: Tenebrionidae). *Entomophaga* 30: 1-10.

Lohmeyer, H.M., 1974. *Sexual Dimorphism in Beetles*. Elsevier, New York.

Lordkipany, E., 1982. *Wesentliches über die Phänotypen der Geschlechter bei den Käfern*. In: Oberseit, J. (Ed.), 277-294.

Ludwig, K.G., 1984. Systematic overview of Indian *Lepturidea* (Coleoptera: Tenebrionidae).

Ludwig, K.G., Pradhan, N.B. and Vaidya, G.S., 1987. Sex and species specific distribution of the population of *Lepturidea* (Coleoptera: Tenebrionidae) in India. *Entomophaga* 32: 33-40.

Ludwig, K.G., Acharya, B.R. and Sardana, K.L., 1991. Seasonal variation in beetle sex pheromones. National Seminar Series, Institute of Phytosanitary Measurements of Biological Activity, 70-90.

Muthukrishna, R. and Ponnuswamy, R., 1979. *Phylogenetic position of the genus Lepturidea* (Coleoptera: Tenebrionidae) based on the study of the male genitalia. *Entomophaga* 26: 185-192.

Nalepa, T.F., 1982. *Phylogeny of beetles*. In: J. Beckman (Ed.), *Handbook of Insect Science*, Volume 10. Academic Press, London, 1-246.

Turton, A.B.: 1983, 'The status of three autochthonous trout in Ontario', *Canadian Journal of Fisheries and Aquatic Sciences* 40, 103-108.

U.S. Fish & Wildlife Service: 1980, *Final Recovery Plan for the Lake St. Louis brook Trout*, U.S. Fish and Wildlife Service, National System of Public Lands, Washington, D.C., 19 pp.

U.S. Department of Agriculture - Forest Service: 1984, 'Lake st. Louis trout' 1983-1984 Annual Report.

U.S. Department of Agriculture - Forest Service: 1985, 'Lake st. Louis trout' 1984-1985 Annual Report.

U.S. Department of Agriculture - Forest Service: 1986, 'Lake st. Louis trout' 1985-1986 Annual Report.

U.S. Department of Agriculture - Forest Service: 1987, 'Forest Resource Conservation Act Information for Cooperative Agreements: Fisheries activities and areas of other federal lands'.

U.S. Geological Survey: 1984, 'Geographic names of lakes, rivers, and streams, and Michigan's 100 largest lakes' (unpublished data).

U.S. National Marine Fisheries Service: 1978, 'Status of the pink salmon fishery in the Bering Sea', *Proceedings of the Annual Meeting of the North Pacific Anadromous Fish Commission*, Vol. 1, 1-12.

Van der Valk, A.J.: 1986, 'Climate or habitat? Management, habitat heterogeneity, and species diversity', *Ecology Letters* 11, 77-83.

Watson, R.M. and Jackson, J.D.: 1985, 'Predictive analysis of habitat and climate variables for the distribution of the lake st. Louis brook trout in Ontario', *Canadian Journal of Fisheries and Aquatic Sciences* 42, 41-44.

Wright, G.L.: 1977, 'Males and females of three Ontario fish' in: *Ontario Fish*, 1-17.

Wright, G.L.: 1982, 'Climatic origins of freshwater fish' in: *Ontario Department of Natural Resources, Ontario Fishery Management Series*, 1-16.

Wright, G.L. and Jackson, J.D.: 1986, 'Predictive and theoretical analyses of habitat heterogeneity and climate for lake st. Louis brook trout' in: *Ontario Fish*, 1-17.