

overcome in certain types, therefore Collema and some others have disappeared from this cause alone. Smoke, especially in and about towns, has been very detrimental to these forms, as well as some other plants. Of the list given here, some genera will be mentioned in the order of disappearance. They have partly or wholly vanished during my observations of more than 20 years on these points, where the conditions have been much changed. The first genera to disappear were Collema, Peltigera, Sticta, Usnea, and Umbilicaria. The following forms have retained more or less completely their habitats. The first two are less common: Graphis, Lecidea, Physcia, Parmelia, and Cladonia. In the densely populated places all of these last five have entirely disappeared from limited areas.

SOME FLOWERING PLANTS OF MONROE COUNTY, INDIANA.

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The following list of plants is a partial enumeration of the flowering plants of Monroe County which the writer has recorded over a stretch of many years and includes certain escaped and introduced forms. The families of plants mentioned in this list have been arranged in the same order as those of the seventh edition of Gray's Manual of Botany.

TYPHACEAE: *Typha latifolia*

NAJADACEAE: *Potamogeton natans*

ALISMACEAE: *Sagittaria latifolia*, *Alisma Plantago-aquatica*

HYDROCHARITACEAE: *Elodea canadensis*

ARACEAE: *Arisaema triphyllum*, *Dracontium*, *Acorus Calamus*

LEMNACEAE: *Lemna trisulca*

COMMELINACEAE: *Tradescantia brevicaulis*, *pilosa*, *virginiana*, *Commelina virginica*

PONTEDERIACEAE: *Heteranthera reniformis*

JUNCACEAE: *Juncus tenuis*, *effusus*, *acuminatus*, *Luzula campestris*

LILIACEAE: *Uvularia perfoliata*, *grandiflora*, *Allium tricoccum*, *cernuum*, *virgale*, *Hammerocallis fulva*, *Lilium canadense*, *Erythronium americanum*, *albidum*, *Camassia esculenta*, *Ornithogalum umbellatum*, *Muscari botryoides*, *Yucca filamentosa*, *Asparagus officinalis*, *Smilacina race-*

mosa, *Polygonatum biflorum*, *commutatum*, *Convallaria majalis*, *Medeola virginiana*, *Trillium sessile*, *recurvatum*, *erectum*, *nivale*, *Smilax herbacea*, *rotundifolia*, *Bona-nox*, *hispida*, *pseudo-china*

DIOSCOREACEAE: *Dioscorea villosa*

AMARYLLIDACEAE: *Narcissus pseudo-narcissus*, *poeticus*, *Hypoxis hirsuta*

IRIDACEAE: *Iris versicolor*, *I. cristata*, *Belamcanda chinensis*, *Sisyrinchium angustifolium*, *S. gramineum*

ORCHIDACEAE: *Cypripedium parviflorum*, *acaule*, *Orchis spectabilis*, *Habenaria peramoena*, *Pogonia verticillata*, *Spiranthes gracilis*, *cernua*, *Epipactis pubescens*, *Corallorhiza odontorhiza*, *Microstylis unifolia*, *Liparis liliifolia*, *Aplectrum hyemale*

SALICACEAE: *Salix nigra*, *amygdaloides*, *cordata*, *discolor*, *humilis*, *Populus alba*, *tremuloides*, *grandidentata*, *balsamifera*, *deltoides*

- JUGLANDACEAE: *Juglans cinerea*, *nigra*, *Carya ovata*, *laciniosa*, *alba*, *microcarpa*, *glabra*, *cordiformis*
- BETULACEAE: *Corylus americana*, *Ostrya virginiana*, *Carpinus caroliniana*
- FAGACEAE: *Fagus grandifolia*, *Castanea dentata*, *pumila*, *Quercus alba*, *stellata*, *macrocarpa*, *bicolor*, *Prinus*, *rubra*, *coccinea*, *texana*, *ellipsoidalis*, *velutina*, *nigra*, *palustris*, *imbricaria*
- URTICACEAE: *Ulmus fulva*, *americana*, *Celtis occidentalis*, *Cannabis sativa*, *Humulus Lupulus*, *Maclura pomifera*, *Morus rubra*, *alba*, *Urtica gracilis*, *Laportea canadensis*, *Pilea pumila*, *Boehmeria cylindrica*, *Parictaria pennsylvanica*
- SANTALACEAE: *Comandra umbellata*
- ARISTOLOCHACEAE: *Asarum canadense*, *Aristolochia Serpentina*
- POLYGONACEAE: *Rumex crispus*, *elongatus*, *obtusifolius*, *hastatulus*, *acetosella*, *Polygonum aviculare*, *lapathifolium*, *pennsylvanicum*, *Hydropiper*, *acre*, *orientale*, *Persicaria*, *hydropiperoides*, *virginianum*, *sagittatum*, *scandens*, *dumetorum*, *Fagopyrum esculentum*
- CHENOPODIACEAE: *Chenopodium ambrosioides*, *Bonus-Henricus*, *glaucum*, *hybridum*, *Vulvaria*, *album*, *urbicum*
- AMARANTHACEAE: *Amaranthus retroflexus*, *hybridus*, *gracizans*, *spinosus*, *Gomphrena globosa*
- PHYTOLACCACEAE: *Phytolacca decandra*
- NYCTAGINACEAE: *Oxybaphus nyctagineus*
- ILLECEBRACEAE: *Anychia polygonoides*, *canadensis*, *Mollugo verticillata*
- CARYOPHYLLACEAE: *Arenaria serpyllifolia*, *stricta*, *Stellaria longifolia*, *pubera*, *media*, *Cerastium arvense*, *vulgatum*, *viscosum*, *nulans*, *Agrostemma Githago*, *Silene antirrhina*, *noctiflora*, *virginica*, *stellata*, *latifolia*, *Saponaria officinalis*
- PORTULACACEAE: *Claytonia virginica*, *Portulaca oleracea*, *grandiflora*
- NYMPHAEACEAE: *Nymphaea advena*, *Castalia odorata*
- RANUNCULACEAE: *Ranunculus abortivus*, *recurvatus*, *fascicularis*, *septentrionalis*, *repens*, *Thalictrum dioicum*, *Anemonella thalictroides*, *Hepatica triloba*, *acutiloba*, *Anemone virginiana*, *quinquefolia*, *Clematis virginiana*, *Isopyrum biternatum*, *Helleborus viridis*, *Aquilegia canadensis*, *Delphinium tricornis*, *Actaea alba*, *Hydrastis canadensis*
- MAGNOLIACEAE: *Liriodendron Tulipifera*
- ANONACEAE: *Asimina triloba*
- MENISPERMACEAE: *Menispermum canadense*
- BERBERIDACEAE: *Podophyllum peltatum*, *Jeffersonia diphylla*, *Caulophyllum thalictroides*, *Berberis vulgaris*
- LAURACEAE: *Sassafras variifolium*, *Benzoin aestivale*
- PAPAVERACEAE: *Sanguinaria canadensis*, *Stylophorum diphyllum*
- FUMARIACEAE: *Dicentra Cucullaria*, *canadensis*
- CRUCIFERAE: *Draba verna*, *Alyssum alyssoides*, *Lesquerella globosa*, *Thlaspi arvense*, *Lepidium virginicum*, *Capsella Bursa-pastoris*, *Brassica alba*, *arvensis*, *nigra*, *Sisymbrium officinale*, *Erysimum repandum*, *Radiola Nasturtium-aquaticum*, *sylvestris palustris*, *Armoracia*, *Barbarea vulgaris*, *Iodanthus pinnatifidus*, *Dentaria diphylla*, *heterophylla*, *laciniata*, *Cardamine bulbosa*, *Douglassii*, *hirsuta*, *pennsylvanica*, *Arabis dentata*, *hirsuta*, *laevigata*
- CAPPARIDACEAE: *Polanisia graveolens*, *trachysperma*
- CRASSULACEAE: *Penthorum sedoides*, *Sedum ternatum*
- SAXIFRAGACEAE: *Heuchera americana*, *Mitella diphylla*, *Hydrangea arborescens*, *Ribes Cynosbati*
- HAMAMELIDACEAE: *Hamamelis virginiana*, *Liquidambar Styraciflua*
- PLATANACEAE: *Platanus occidentalis*
- ROSACEAE: *Physocarpus opulifolius*, *Spiraea salicifolia*, *Aruncus sylvestris*, *Pyrus coronaria*, *Malus*, *americana*,

- Amelanchier canadensis*, *Crataegus Oxyacantha*, *Crus-galli*, *punctata*, *coccinea*, *flava*, *tomentosa*, *Fragaria virginiana*, *vesca*, *Potentilla arguta*, *monspeliensis*, *norvegica*, *fruticosa*, *canadensis*, *Geum canadense*, *vernum*, *Rubus occidentalis*, *allegheniensis*, *canadensis*, *hispidus*, *villosus*, *Agri-monia striata*, *mollis*, *parviflora*, *rostellata*, *Rosa setigera*, *rubiginosa*, *carolina*, *virginiana*, *humilis*, *Prunus serotina*, *virginiana*, *angustifolia*, *Mahaleb*, *americana*, *Persica*
- LEGUMINOSAE: *Gymnocladus dioica*, *Gleditsia triacanthos*, *Cassia marilandica*, *Medsgeri*, *Cercis canadensis*, *Cladrastis lutea*, *Trifolium arvense*, *incarnatum*, *pratense*, *repens*, *hybridum*, *procumbens*, *Melilotus officinalis*, *alba*, *Medicago sativa*, *lupulina*, *hispida*, *Robinia Pseudo-Acacia*, *Desmodium nudiflorum*, *grandiflorum*, *rotundifolium*, *viridiflorum*, *Dillenii*, *paniculatum*, *Lespedeza procumbens*, *repens*, *violacea*, *hirta*, *Vicia Cracca*, *Phaseolus deversifolia*, *Strophostyles helvola*, *Amphicarpa monoica*
- LINACEAE: *Linum usitatissimum*, *virginianum*
- OXALIDACEAE: *Oralis violacea*, *stricta*, *corniculata*, *repens*
- GERANIACEAE: *Geranium maculatum*, *carolinianum*
- RUTACEAE: *Zanthoxylum americanum*
- SIMARUBACEAE: *Ailanthus glandulosa*
- EUPHORBIACEAE: *Acalypha virginica*, *Euphorbia serpyllifolia*, *Prellii*, *maculata*, *humistrata*, *marginata*, *corollata*, *Cyparissias*, *commutata*
- CALLITRICHACEAE: *Callitriche heterophylla*
- LIMNANTHACEAE: *Floerkea proserpin-acoides*
- ANACARDIACEAE: *Rhus glabra*, *copallina*, *Toxicodendron*, *canadensis*
- AQUIFOLIACEAE: *Ilex verticillata*
- CELASTRACEAE: *Evonymus atropurpureus*, *obovatus*, *Celastrus scandens*
- STAPHYLEACEAE: *Staphylea trifolia*
- ACERACEAE: *Acer saccharum*, *saccharinum*, *rubrum*, *Negundo*
- SAPINDACEAE: *Aesculus Hippocastanum*, *glabra*
- BALSAMINACEAE: *Impatiens pallida*, *biflora*
- RHAMNACEAE: *Rhamnus cathartica*
- VITACEAE: *Psedera quinquefolia*, *Cissus Ampelopsis*, *Vitis aestivalis*, *cordifolia*
- TILIACEAE: *Tilia americana*
- MALVACEAE: *Abutilon Theophrasti*, *Sida spinosa*, *Malva rotundifolia*, *sylvestris*, *Napaea dioica*, *Hibiscus Trionum*
- HYPERICACEAE: *Hypericum Ascyron*, *graveolens*, *punctatum*, *prolificum*, *mutilum*, *canadense*, *perforatum*
- VIOLACEAE: *Hybanthus concolor*, *Viola pedata*, *cucullata*, *sororia*, *papilionacea*, *sagittata*, *blanda*, *pubescens*, *scabriuscula*, *striata*, *Rafinesquii*
- PASSIFLORACEAE: *Passiflora lutea*
- LOASACEAE: *Opuntia vulgaris*
- THYMELAEACEAE: *Dicra palustris*
- LYTHRACEAE: *Lythrum alatum*, *Cuphea petiolata*
- ONAGRACEAE: *Ludvigia alternifolia*, *palustris*, *Epilobium coloratum*, *Oenothera biennis*, *fruticosa*, *Gaura biennis*, *Circaea lutetiana*, *alpina*
- ARALIACEAE: *Aralia racemosa*, *Panax quinquefolium*
- UMBELLIFERAE: *Sanicula canadensis*, *trifoliata*, *Erigenia bulbosa*, *Osmorhiza Claytoni*, *longistylis*, *Cicuta maculata*, *Cryptotaenia canadensis*, *Thaspium aureum*, *barbinode*, *Pastinaca sativa*, *Daucus Carota*
- CORNACEAE: *Cornus florida*, *alternifolia*, *Nyssa sylvatica*
- ERICACEAE: *Chimaphila maculata*, *Monotropa uniflora*, *Hypopitys*, *Epigaea repens*, *Gaylussacia frondosa*, *baccata*, *resinosa*, *Vaccinium stamineum*, *vaccillans*
- PRIMULACEAE: *Samolus Valerandi*, *Lysimachia Nummularia*, *thyrsiflora*, *Steironema ciliatum*, *lanccolatum*, *Anagallis arvensis*
- SAPOTACEAE: *Diospyros virginiana*

OLEACEAE: *Fraxinus americana*, *Pennsylvanica*, *quadrangulata*, *Ligustrum vulgare*

GENTIANACEAE: *Sabatia angularis*, *Gentiana Andrewsii*, *Obolaria virginica*

APOCYNACEAE: *Vinca minor*, *Apocynum androsaemifolium*, *cannabinum*

ASCLEPIADACEAE: *Asclepius tuberosa*, *incarnata*, *speciosa*, *syriaca*, *quadrifolia*, *Acerates floridana*, *Gonolobus laevis*

CONVOLVULACEAE: *Ipomoea hederacea*, *purpurea*, *pandurata*, *lacunosa*, *Convolvulus sepium*, *arvensis*, *Cuscuta Gronovii*

POLEMONIACEAE: *Phlox maculata*, *divaricata*, *bifida*, *Polemonium reptans*

HYDROPHYLLACEAE: *Hydrophyllum macrophyllum*, *virginianum*, *appendiculatum*, *Phacelia bipinnatifida*, *Purshii*, *dubia*

BORAGINACEAE: *Cynoglossum officinale*, *virginianum*, *Lappula virginiana*, *Symphytum officinale*, *Lycopsis arvensis*, *Mertensia virginica*, *Lithospermum arvense*, *latifolium*, *Gmelini*, *canescens*, *Echium vulgare*

VERBENACEAE: *Verbena urticaefolia*, *angustifolia*, *hastata*, *stricta*, *bracteosa*, *canadensis*

LABIATAE: *Teucrium canadense*, *Isanthus brachiatus*, *Scutellaria lateriflora*, *versicolor*, *canescens*, *Marrubium vulgare*, *Agastache nepetoides*, *Mechania cordata*, *Nepeta Cataria*, *hederacea*, *Prunella vulgaris*, *Synandra hispidula*, *Lamium amplexicaule*, *album*, *Leonurus Cardiaca*, *Stachys tenuifolia*, *Monarda clinopodia*, *fistulosa*, *Blephilia ciliata*, *hirsuta*, *Hedeoma pulegiodes*, *Pycnanthemum flexuosum*, *incanum*, *muticum*, *Cunila origanoides*, *Lycopus virginicus*, *americanus*, *Mentha spicata*, *piperita*, *Collinsonia canadensis*

SOLANACEAE: *Solanum Dulcamara*, *nigrum*, *carolinense*, *rostratum*, *Physalis pubescens*, *viscosa*, *subglabrata*, *Nicandra Physalodes*, *Lycium halimifolium*, *Datura Stramonium*, *Tatula*

SCROPHULARIACEAE: *Verbascum Thapsus*, *Blattaria*, *Linaria vulgaris*, *Scrophularia marilandica*, *Pentstemon hirsutus*, *laevigatus*, *Chelone glabra*, *Mimulus ringens*, *alatus*, *Conoclea multifida*, *Ilysanthes anagallidea*, *Gratiola virginiana*, *Veronica officinalis*, *serpyllifolia*, *peregrina*, *arvensis*, *Seymeria macrophylla*, *Gerardia flava*, *virginica*, *tenuifolia*, *Pedicularis canadensis*

OROBANCHACEAE: *Epifagus virginiana*, *Conopholis americana*, *Orobanche uniflora*

BIGNONIACEAE: *Tecoma radicans*, *Catalpa speciosa*, *bignonioides*

ACANTHACEAE: *Dianthera americana*, *Ruellia strepens*

PHRYMACEAE: *Phryma Leptostachya*

PLANTAGINACEAE: *Plantago major*, *Rugelii*, *lanceolata*, *aristata*, *virginica*

RUBIACEAE: *Galium Aparine*, *circaeans*, *latifolium*, *trifidum*, *tinctorium*, *concinnum*, *triflorum*, *Mitchella repens*, *Cephalanthus occidentalis*, *Houstonia caerulea*, *purpurea*, *longifolia*

CAPRIFOLIACEAE: *Lonicera sempervirens*, *dioica*, *Symphoricarpos orbiculatus*, *Triosteum perfoliatum*, *angustifolium*, *Viburnum acerifolium*, *Lentago*, *prunifolium*, *Sambucus canadensis*

VALERIANACEAE: *Valeriana officinalis*, *pauciflora*

DIPSACACEAE: *Dipsacus sylvestris*

CUCURBITACEAE: *Sicyos angulatus*, *Echinocystis lobata*

CAMPANULACEAE: *Specularia perfoliata*, *Campanula americana*, *aparinoides*

LOBELIACEAE: *Lobelia cardinalis*, *siphilitica*, *spicata*, *inflata*

COMPOSITAE: *Vernonia noveboracensis*, *fasciculata*, *altissima*, *Eupatorium purpureum*, *serotinum*, *altissimum*, *sessilifolium*, *perfoliatum*, *urticaefolium*, *coelestinum*, *Solidago caesia*, *latifolia*, *bicolor*, *ulmifolia*, *nemoralis*, *canadensis*, *graminifolia*, *Aster divaricatus*, *novae-angliae*, *azureus*, *Shortii*, *cordifolius*, *Lowricanus*,

sagittifolius, *turbinellus*, *laevis*, *ericoides*, *multiflorus*, *dumosus*, *Tradescanti*, *Erigeron pulchellus*, *phildelphicus*, *vernus*, *annuus*, *ramosus*, *canadensis*, *divaricatus*, *acris*, *Antennaria plantaginifolia*, *Gnaphalium polycephalum*, *Inula Helenium*, *Polymnia canadensis*, *Ambrosia trifida*, *artemisiifolia*, *Xanthium canadense*, *Heliopsis helianthoides*, *scabra*, *Eclipta alba*, *Rudbeckia triloba*, *hirta*, *laciniata*, *Helianthus annuus*, *lactiflorus*, *mollis*, *microcephalus*, *doronicoides*, *divaricatus*, *hirsutus*, *strumosus*, *decapetalus*, *Actinomeris alternifolia*, *Bidens frondosa*, *connata*, *cernua*, *bipinnata*, *trichosperma*, *Galinsoga parviflora*, *Helenium autumnale*, *Dyssodia papposa*, *Achillea*

Millefolium, *Anthemis Cotula*, *Chrysanthemum Leucanthemum*, *Parthenium*, *Tanacetum vulgare*, *Artemisia Abrotanum*, *Absinthium*, *Erechtites hieracifolia*, *Cacalia reniformis*, *atriplicifolia*, *Senecio aureus*, *Arctium minus*, *Cirsium lanceolatum*, *discolor*, *altissimum*, *muticum*, *arvense*, *Centaurea Cyanus*, *Cichorium Intybus*, *Krigia virginica*, *amplexicaulis*, *Tragopogon porrifolius*, *Taraxacum officinale*, *erythrospermum*, *Sonchus oleraceus*, *asper*, *Lactuca scariola*, *canadensis*, *integrifolia*, *hirsuta*, *villosa*, *floridana*, *spicata*, *Pyrrhoppappus*, *carolinianus*, *Prenanthes alba*, *altissima*, *Hieracium venosum*, *paniculatum*, *scabrum*, *Gronovii*