MISSOURI & ARKANSAS: THE OZARKS & TALLGRASS PRAIRIES

A NATURAL HISTORY OF AMERICA'S HEARTLAND

MAY 3-12, 2019



Buffalo River Valley. Photo S. Hilty 2019

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MISSOURI & ARKANSAS: THE OZARKS & TALLGRASS PRAIRIES May 3–12, 2019 By Steve Hilty

This was a trip of superlatives—some good, some of questionable merit—but we found all of our target birds, and each of them provided exceptional viewing opportunities, often for extended periods of time. Also, spring flowers and botanizing generally were excellent, and tallgrass prairie flowers were absolutely glorious, especially at the Sheldon L. Cook Memorial prairie. And who will forget the feisty little Prairie Crayfish that got caught exposed above ground for all to see.

A little background regarding the spring weather this year adds some perspective to what follows. The midwest experienced very high rainfall this spring, especially the week previous to our trip, and the rain continued off and on throughout the trip, making this perhaps the rainiest and cloudiest spring Ozarks and Prairies trip I have guided in almost thirty years. We rarely saw the sun, so butterflies were virtually non-existent, but remarkably, for all the rainy forecasts, threatened and real, it was only on the last day that it began to interfere with birding.

Several aspects of this trip have changed notably in the last year or two, among them: 1) now finding few restaurants open for early breakfasts (several have closed) so we are now faced with an increasing number of McDonald's breakfasts (a dubious distinction); 2) a remarkable upsurge in prescribed burns in the forest understory of US Forest Service managed national forests. This is doubtless in response to edicts from higher up after the devastating fires in California...but this isn't California. Rainfall is relatively high in the Ozarks, fires are not common, and, when they occur, they are usually small and confined to the "balds." All the burning has left virtual biodiversity deserts in the wake of massive understory burns—no ground and understory nesting birds, no saplings or understory plants (woody and herbaceous, and there are many of both here). Large areas looked like city parks instead of healthy diversified forests. Things likely will return to normal...if the burning does not continue on an annual basis.

Birding in Prairie State Park was excellent with resident breeders such as Dickcissels, Brown Thrashers, Bell's Vireos, and a lovely little Henslow's Sparrow much in evidence. We also saw a Sedge Wren briefly and found reasonably good floral diversity—Yellow Star Grass, Shooting Stars, Wood Betony, Rose Verbena, False Garlic, and Cream Wild Indigo. But the best floral show was at a privately managed prairie—the Sheldon L. Cook tallgrass prairie near Golden, Missouri—where we experienced an impressive display of flowering plants, especially Indian Paintbrush and Wood Betony. By late afternoon we were in Eureka Springs, Arkansas, with time for a brief tour of this unusual city, which boasts more than 90 natural springs and some of the most ornate old Victorian homes to be found anywhere (plenty of employment for painters).

My favorite birding and botanizing road at Roaring River State Park in Missouri could not be accessed this year because of flooding and large boulders blocking the entrance to the road. Construction at the fish hatchery and extensive burning on the upland trail also

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impeded our activities; however, despite the setbacks, we managed some reasonable ridgetop birding for warblers and a lively pair of Wood Thrushes. In the afternoon, at a "bald" (natural bare hilltop) near Branson, we enjoyed a Prairie Warbler, Yellow-breasted Chat, and our first views of the sprawl of Branson's music theater district.

Because of the broad natural history focus of this trip and the varied activities each day, a review of trip highlights reveals much more than birds. Over succeeding days there were hikes to waterfalls and into beautiful valleys such as Hide-out-Hollow, Lost Valley, and Alum Cove natural bridge, and who will forget the two exciting Cerulean Warblers that we saw so well along a highway overlook above the Buffalo River. The beauty and peacefulness of canoeing the Buffalo River was a little rushed this year because of high water, but we still enjoyed a nice float and got off the river just minutes before a rainstorm hit.

We spent two pleasant mornings birding, botanizing, and simply enjoying beautiful places along sections of Sylamore Creek in Ozark National Forest. There were Ozark Chinkapin trees, Smoke trees, Venus' Hair Ferns, a Worm-eating Warbler, a Pine Warbler, giant Short-leaf Pines, and a Timber Rattlesnake among other things. We also visited Blanchard Spring and descended twenty stories below ground for a walking trip through the lovely upper level of Blanchard Caverns. Ozark hills are honeycombed with caves, the result of water working its way through limestone over eons of time. This water reappears in the form of thousands of springs that dot the region, some mere seeps on hillsides, others ranking among the largest in the world.

On our next to last day we visited Mammoth Spring, which pours out nearly 10 million gallons of water an hour (no, that is not a misprint!) and Greer Springs about half that. Aside from the prairie, perhaps our best morning of birding was in the Eleven-Point River Campground and along the nearby highway and bridge ("dubbed the "Bridge of Death" by Mike because of local vehicles that raced past us and across the bridge without slowing even slightly). Still, with fabulous views of a Swainson's Warbler, a couple of Bluewinged Warblers, American Redstarts, Prothonotary Warblers, Yellow Warblers, and a Yellow-throated Vireo, among others, it was a wonderful early morning of birding, even if most of it was in light rain. Then it was off to Greer Springs, part of which flows from a cave and even more from a great boil of water further down the spring branch (super impressive this year!)—all in all ranking among the top ten largest springs on the continent. Rain in varying intensity continued, and we stopped briefly at Falling Spring (no picnic today) before continuing on to Winona for an unscheduled lunch at Flossie's Apple Barrel Restaurant, which proved surprisingly good. With rain continuing, we returned to Springfield, arriving midafternoon.

Our lists reflect the wide range of activities on this trip—birds, plants (a lot of plants), butterflies (few this year), mammals, reptiles, a crayfish or two, traditional Ozark crafts and music, a little geology, a cave trip, and a canoe trip—all of which, I hope, provided an introduction to the beauty and charm of this fascinating region. With all of the natural history, this was a full-packed trip, and we hope it left you with fond memories of one of North America's loveliest but often-overlooked regions. "*Ya'all come back, ya hear!*"

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Greer Springs, Missouri. Photo S. Hilty 2019

ITINERARY:

- May 4. Prairie State Park; afternoon drive to Eureka Springs
- May 5. Roaring River State Park in morning along with picnic lunch; afternoon at Ruth and Paul Henning Conservation Area before entering Branson, Missouri (or is it Missoura'?)
- May 6. A.M. at Drury-Mincy Conservation Area and Bee Creek followed by a drive to Harrison, Arkansas (Hello Nopalitos!). Afternoon on the Hide-out-Hollow trail near Compton, Arkansas
- May 7. Upper Buffalo River country including Lost Valley (massive changes to facilities and virtually no one visiting) and Alum Cove State Park; and a brief evening on Baker Prairie in Harrison, Arkansas
- May 8. Buffalo River float trip from *Dillard's Ferry (Highway 14 bridge) to the ghost town of Rush (with river so high we did it in less than three hours!). Rainy afternoon drive to Mt. View.
- May 9. Morning at Blanchard Spring campground in Ozark National Forest followed by a visit to the spring, lunch, an early afternoon tour of Blanchard Cave, and the balance of the afternoon at the Ozark Folk Center craft grounds in Mountain View and some old-time music (a little weak on talent this year) at the Folk Center tonight.
- May 10. Morning along Sylamore Creek with Worm-eating Warbler, Timber Rattlesnake(!), and lots of plants and ferns. Late afternoon at Mammoth Spring park and even with time for a tour of the old Frisco RR depot.
- May 11. Early morning birding along the Eleven Point River and the balance of the day visiting and birding the trail to Greer Springs and quick rainy stop at Falling Spring. Back to Springfield, Missouri for conclusion of trip. Dinner at Holiday Inn in Springfield.
- May 12. Departures for home.
- <u>ACKNOWLEDGMENTS</u>: I want to especially thank Dwight and Mike for spotting many birds on this trip, and to thank all of you for pointing out or inquiring about numerous plants. Lastly, I'd also like to thank all of you for your interest, your many questions, and for your curiosity about the birds, plants, wildlife, and geology of this often-overlooked region of our country.

<u>A NOTE ABOUT THE LISTS</u>: The lists include all of the birds, and most (but probably not all) of the plants, animals, and herps that were mentioned, or noted somewhere. With a natural history trip as broad-based as this one, there are bound to be omissions here and there.

LIST OF BREEDING & MIGRANT BIRDS SEEN: Species only heard are marked with a double asterisk (**). Boldface indicates uncommon, local, or of special interest.

Canada Goose, Prairie State Park; breeding at Mammoth Springs for the first time <u>Wood Duck</u>, two pairs with ducklings (very cute) at Mammoth Springs; fewer than last year



Wood Duck. Mammoth Springs. Photo: S. Hilty 2018

**Northern Bobwhite, Prairie State Park

[We saw no Greater Prairie Chickens; staff at Prairie State Park did mention reports of 2 being seen earlier this year; now virtually extinct in Missouri]

Wild Turkey, hear and/or seen briefly a few times

Rock Dove, Feral birds in towns, on cliffs of Buffalo Point on Buffalo River

Eurasian Collared Dove, several in or near towns including near Branson, Harrison etc.

Mourning Dove, daily

**Yellow-billed Cuckoo, heard at Drury-Mincy Bald campground but not seen; 1 seen flying across Buffalo river by Steve and Mary

Common Nighthawk, overhead in Branson; a couple late evening high over Harrison

Chimney Swift, small numbers

Ruby-throated Hummingbird, 1-2 seen on at least 4 days

Killdeer, Prairie State Park; heard at parking lot of hotel in Mammoth Springs

Spotted Sandpiper, scattered singles throughout trip; far fewer on Buffalo River float, likely because of high water

Solitary Sandpiper, 1 on Beaver pond in upper Lost Valley area

Lesser Yellowlegs, group of 7 in flight over Prairie State Park

Great Blue Heron, singles most days; several along Buffalo River

Green Heron, Prairie State Park; Buffalo River, etc.

Black Vulture, almost daily from near Eureka Springs onward

Turkey Vulture, daily in large numbers (plenty of road-kill to eat)

Mississippi Kite, 1 soaring with vultures over Hardy, Arkansas; in my experience this is an uncommon bird in Arkansas (at least this far east); breeds locally in central (to Little Rock) and southern

Arkansas and very locally in west (Fayetteville)

Bald Eagle, 2 (presumably) along Buffalo River; both adults

Cooper's Hawk, 1 in Ruth & Paul Henning bald

Red-shouldered Hawk, we saw only a couple (including 1 soaring over Hardy, Arkansas, where we saw it from the McDonald's parking lot

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Broad-winged Hawk, should have been almost daily in forested Ozark region but we saw only a couple (1 very brief as it dived in front of our van for something at roadside

Red-tailed Hawk, almost daily for first half of trip

Belted Kingfisher, along Buffalo River and Sylamore Creek

<u>Red-headed Woodpecker</u>, one at the Frisco RR depot museum at Mammoth Springs

Red-bellied Woodpecker, heard or seen daily

Downy Woodpecker, heard or seen several times

**Hairy Woodpecker, heard once in Prairie State Park campground

<u>Pileated Woodpecker</u>, heard most days; seen very well at Lost Valley Picnic site and in Blanchard Spring area

Eastern Wood Pewee, several sites

Acadian Flycatcher, heard and seen at Lost Valley in upper Buffalo River Valley; also heard along the Gunner Pool trail (near Blanchard) and at Greer Springs

Least Flycatcher, heard along Bee Creek (distinctive "che'bek" call; may have been heard also at Prairie State Park

Eastern Phoebe, daily near creeks and rocky areas; bridges; old buildings; above springs

**Great Crested Flycatcher, heard almost daily but somehow we never managed to see it

- Eastern Kingbird, Prairie State Park and along roadsides elsewhere; some migratory birds across Prairie state Park
- Scissor-tailed Flycatcher, trees and fences and open areas on most days although not at Prairie State Park this year; 1 at Baker Prairie in Harrison



Scissor-tailed Flycatcher, St. Clair Co., Missouri. Photo: S. Hilty 2017

White-eyed Vireo, heard at Ruth and Paul Henning bald near Branson (seen briefly); pair seen very well in upland brushy forest boarder where we stopped prior to reaching the Gunner Pool Campground

Bell's Vireo, seen very well at Prairie State Park

Yellow-throated Vireo, seen very well near the Eleven Point River

Warbling Vireo, Prairie State Park (hd); seen well at Mammoth Spring where singing constantly; also heard at the Riverbend Restaurant in Mammoth Spring

Red-eyed Vireo, daily; commonest bird in the Ozarks (along with Indigo Bunting) Blue Jay, daily

American Crow, daily

Fish Crow, in most towns from Harrison area onward; most commonly near Mammoth Springs; distinctive call heard several times (or was it Dwight with his uncanny imitation?)

Purple Martin, seen around martin houses on several days, mostly as we were driving

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Missouri & Arkansas: The Ozarks & Tallgrass Prairies, 2019 Tree Swallow, small migratory groups over Prairie State Park;

- Northern Rough-winged Swallow, along rivers and cliffs; pair probably nesting in a cliff cavity near Buffalo Point on Buffalo River
- **Bank Swallow**, 1 (or 2?) circling over Eleven Point River where probably a migrant; no regular colonies known in Arkansas although has bred in past; now declining; chest band clearly evident
- Cliff Swallow, nesting under bridges in many areas but curiously none nesting on bluffs overlooking the Buffalo River; massive number of birds (and nests) over White River at highway junctions north of Mountain View, Arkansas
- Barn Swallow, daily
- Carolina Chickadee, daily; birds at Prairie State Park may be hybrids in a zone where this species and Black-capped Chickadees occur; only Carolina's are found southward throughout Ozarks
- Tufted Titmouse, all areas but we didn't see much of them
- White-breasted Nuthatch, seen a few times
- House Wren, 1 the first day at Prairie State Park campground (not common here)
- Sedge Wren, 1 in Prairie State Park; unusual at this time of year because few are seen until mid-July when northern birds apparently reposition southward to breed (again?)
- Carolina Wren, heard and/or seen in all areas; common voice

Blue-gray Gnatcatcher, Roaring River and most days thereafter

Ruby-crowned Kinglet, one along Bee Creek (southeast of Branson) was seen by Steve (others?)

- Eastern Bluebird, daily supplanted
- **Veery,** One seen along Greer Springs trail; it flew down to ground and supplanted a Swainson's Thrush that was in the trail; excellent views of this uncommon boreal migrant (minimal spotting on underparts, rufous tinge to upperparts; seen well on the ground in middle of the trail and later when in flew and perched on a dead branch a few feet above the ground
- Swainson's Thrush, singles or small numbers most days but **up to 50+ seen or heard at** Roaring River State Park
- **Gray-cheeked Thrush**, a loose group of about 6 (at least we saw that many and there were likely more) in Lost Valley but nowhere else; boreal migrant in small numbers that passes through quickly
- <u>Wood Thrush</u>, we heard the lovely song of this species in several areas; pair or triples acting aggressively as they seemed to be sorting out territories in Roaring River State Park; **an estimated 6+ pairs in** Lost Valley (and with more song in Lost Valley than I have ever heard previously); also heard at other scattered forest localities

American Robin, daily and in full song

Gray Catbird, Prairie State Park; pair also at Mammoth Springs

Brown Thrasher, numerous at Prairie State Park, few afterwards

Northern Mockingbird, daily in towns and country

European Starling, urban areas

Cedar Waxwing, Bombycilla cedrorum, small flocks most days except the last day

House Sparrow, in towns throughout



House Finch, 2 at Wild Bill's Outfitter site above Buffalo River

American Goldfinch, seen most days; common Eastern Towhee, Prairie State Park (several seen); thereafter mostly heard or singles briefly Chipping Sparrow, almost daily around parking

lots, campgrounds and woodland borders Field Sparrow, Prairie State Park; Ruth and Paul

Henning bald Savanna Sparrow, numerous at Prairie State Park; all are boreal migrants or wintering birds that have not yet left

<u>**Henslow's Sparrow**</u>, Prairie State Park (one bird seen at very close range for extended period)

Henslow's Sparrow, Prairie State Park. Photo: S.Hilty 2016

Lincoln's Sparrow, one at Prairie State Park; late

White-throated Sparrow, Prairie State Park

White-crowned Sparrow, Prairie State Park

Yellow-breasted Chat, heard or seen at various sites; first seen well at Ruth and Paul Henning Bald; heard along Buffalo River; this species has been shown to be more closely related to Icterids

(Blackbirds) than to wood-warblers

Red-winged Blackbird, daily

Eastern Meadowlark, daily

Common Grackle ("bronzed" form here), almost all areas but mainly in or near towns and settled areas

Brown-headed Cowbird, daily (too many)

Orchard Oriole, two at Prairie State Park

Baltimore Oriole, several at Prairie State Park; a few later

Ovenbird, heard daily except at Prairie State Park; seen at Roaring River and Lost Valley, briefly on Hideout-Holler' trail south of Harrison

Worm-eating Warbler, Seen super well along Sylamore Creek in the Gunner Pool area; 1 also spotted by Mike in upper part of Lost Valley and this one seen only by Steve and one or two others

Louisiana Waterthrush, rather scarce this year; seen on Buffalo River float (by some); also at the Blanchard Springs parking lot

Blue-winged Warbler, 2 at Eleven-point River Campground (seen very well)

Black-and-white Warbler, heard or seen (males and females) a few times but surprisingly scarce this year Prothonotary Warbler, 2 near Eleven Point River

Swainson's Warbler, pair seen well near Eleven Point River

Tennessee Warbler, heard and seen a few times early in the trip, mainly Prairie State Park and Roaring River

Nashville Warbler, Prairie State Park (1 female seen by Steve; probably also Dwight, Mike and a few others

Kentucky Warbler, seen or heard most days except Prairie State Park; seen very well at Bee Creek where we watched a female carry nest material to a ground level site

Common Yellowthroat, seen at Prairie State Park; heard along Buffalo River; also Eleven Point river **Hooded Warbler**, heard almost daily in Ozarks and seen on a few occasions occasions including Lost

Valley; Buffalo River; possibly elsewhere; one of the commonest breeding warblers in the Ozarks

American Redstart, another common Ozark breeder seen or heard almost daily (except Prairie State Park); female building a nest fork in tree along Bee Creek

Cerulean Warbler, much has been made of its decline of this species and, sadly, this also is true in the

Ozarks; we saw two males in relatively large trees near the Buffalo Wilderness Area (above Ponca); I did not heard it elsewhere but with so much rain many warblers were less vocal during this trip

Northern Parula, heard and/or seen almost daily; many excellent studies [Bay-breasted Warbler, 1 male seen by Steve at Roaring River State Park but, unfortunately, it was not seen by anyone else and just seemed to move steadily away from us]

Yellow Warbler, seen at Prairie State Park, Mammoth Springs; Eleven-point River

*Chestnut-sided Warbler, heard at Drury-Mincy bald campground area but never seen

Blackpoll Warbler, male at Roaring River State Park; at least 3 seen at Drury-Mincy Conservation area

Pine Warbler, Blanchard Spring campground; 1 also seen in pines by Mike and I along "Hide-out-Holler" trail south of Harrison

Yellow-rumped Warbler, numerous in wooded campground at Prairie State Park; also at Roaring River and two at Drury-Mincy Bald

Yellow-throated Warbler, heard almost daily (except Prairie State Park); first seen well from Highway 74 bridge over Buffalo River and just below Lost Valley; thereafter heard/seen at various sites

Prairie Warbler, Ruth and Paul Henning Conservation area & Drury-Mincy Conservation area



Prairie Warbler, Ruth & Paul Henning Conservation area, Branson, Mo. Photo: S. Hilty 2018

- Prairie Warbler, west of Branson (seen beautifully) at Ruth and Paul Henning Conservation Area; also at Drury-Mincy Conservation area the following morning
- **Black-throated Green Warbler**, 1 found by Dwight and seen by almost everyone along the Hide-out-Holler' trail; this species has breed locally in Ozarks
- Summer Tanager, in wooded picnic area at Prairie State Park; migrating pair in trees by big grain storage bin near Prairie State Park; and scattered birds elsewhere on trip
- <u>Scarlet Tanager</u>, a common breeder in oak-hickory forest on slopes and ridges but little in evidence this year; we saw two males along the Gunner Pool trail of Ozark National Forest; also hear along the Greer Springs trail
- Northern Cardinal, all areas; males often perching very high when singing
- Rose-breasted Grosbeak, mostly males; seen the first four days of trip
- <u>Blue Grosbeak</u>, one male perched up high and singing in treetops of Drury-Mincy Conservation area; another male carrying food into a roadside thicket south of the village of Compton (near Buffalo River)

Indigo Bunting, daily but not as numerous either by sight or voice as in previous years

Dickcissel, common to abundant at Prairie State Park; also at Baker Prairie in Harrison, Arkansas

MAMMALS:

Virginia Opossum, dozens killed on roadsides Armadillo, we saw perhaps a hundred or more road kills; none actually seen alive Gray Squirrel, throughout Ozarks Fox Squirrel, Prairie State Park Eastern Chipmunk, Skillet Restaurant at Ozark Folk Center Common Muskrat, several at Mammoth Springs State Park Eastern Cottontail, one seen the second day (Roaring River or Ruth and Paul Henning area?) White-tailed Deer, singles on three days [American Bison, Prairie State Park (somehow we never managed to see one)] Elk, a herd of 13 seen relatively close in the Buffalo River Valley near Lost Valley

REPTILES AND AMPHIBIANS:

Frogs and Toads:

*Cope's Gray Treefrog, heard somewhere but I forgot to write it down American Toad, 1 seen (a student was holding it) along the Greer Trail

Salamanders:

Salamander species? 2 very small ones (immature stage) in shallow clear water of creek at Lost Valley

Turtles:

Red-eared Slider, Mammoth Springs

Common Snapping Turtle, one or two on roads

Common Map Turtle, *Graptemys geographica*, this is the common turtle on the Buffalo River; we saw only a few because water was so high; rather thick necked and large headed with numerous narrow yellow stripes on greenish heads; also at Mammoth Springs

Three-toed Box Turtle, seen at several sites and on road several times

Skinks and Lizards:

Eastern Fence Lizard, *Sceloporus undulatus*, Ruth and Paul Henning State Park (Bald; Ozark Folk Center Five-lined Skink, *Eumeces fasciatus*, a blue-tailed young one was seen by part of group Broad-headed Skink, Lost Valley (less common than the previous two); orangish head

Snakes:

Ringneck Snake, Alum Cove (very small snake with pale orange ring around neck) Speckled Kingsnake, 1 seen close in campground at Alum Cove State Park Northern Water Snake, *Nerodia sipedon*, 1 on Buffalo River trip (went under canoe of Mary and Steve) Timber Rattlesnake, this one was curled in leaves (but in plain sight, you just had to pick it out) about 6 feet off the Gunner Pool trail in Ozark National Forest; spotted by Steve after everyone walked past it; eerily fascinating to see it so close

Crayfish:

Prairie Crayfish, burrows seen in the prairies and the owner of one was fully out in the open along a path and quite ready to defend him (or her) self; another once, less lucky, had been eaten, only its shell remained on the trail

<u>BUTTERFLIES AND MOTHS</u>: we did not identify many butterflies, because there were few around this year because of the rainy and cold temperatures and lack of sunshine; the following short list includes a few species that I recall being discussed (and there were surely others)

Swallowtails (Papilionidae)

Spicebush Swallowtail

Brushfoots (Nymphalidae) Red-spotted Purple

Skippers (Hesperidae) Silver-spotted Skipper

TREES, SHRUBS AND VINES IDENTIFIED

Note that the taxonomy of numerous plants on this list at both the generic and species level, and sometimes also at the family level, has changed. Most books and popular guides, and even most web-based sites, however, have not caught up to the newest taxonomy. The nomenclature used here is that found in most older (and more familiar) references. Newer taxonomy (if you are interested) can be found on several internet sites.

Some newer Apps available if you don't want to carry a library of books: *Wildflowersearch.com* (also *wildflowersearch.org*) has free apps for a large number of states (e.g. Missouri, Arkansas, Oklahoma, etc.) Also on internet see: Missouri Flora (**www.missouriplants.com**)) and for Kansas Flowering Plants and Grasses (**www.kswildflower.org**)

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Ash Family (Olaceae)

Fringe Tree, *Chionanthus virginicus*, 1 in flower on Mo-Ark state border south of Bee Creek White Ash, *Fraxinus americana*, (U-shaped leaf scar), otherwise much like Green Ash

Blue Ash, *Fraxinus quadrangulata*, Gunner Pool; Blue Springs; this ash has bluish sap that will tint a glass of water pale blue; the stems are square

Common Privet, Ligustrum vulgare, urban areas

Bean (Pea) Family (Fabaceae)

Lead Plant, *Amorpha fruticosa*, Prairie State Park Redbud, *Cercis canadensis*, common

Keubud, Cercis canadensis, common

Yellow Wood, Cladrastis kentukea, Lost Valley; Blanchard Springs parking lot and other sites;

showy white cascades of flowers

Honey Locust, Prairie State Park and other sites

Mimosa, Albizzia julibrissin, Gunner Pool Trail

Bristly-Locus (or Brdistly-rose), Robiia hispida, Eleven Point River roadside

Black Locust, throughout and flowering everywhere

Oak Family (Fagaceae)

American Beech, Fagus grandifolia, Lost Valley

Ozark Chinkapin, Castanea ozarkensis, Gunner Pool entrance road

Eastern White Oak, Quercus alba, all Ozark areas

Bur Oak, Quercus macrocarpa, several areas; small parking lot near Eleven Point River

Post Oak, Quercus stellata, Ruth and Paul Henning Conservation Area

Chinkapin Oak, *Quercus meublenbergii*, many areas beginning with Roaring River state park Northern Red Oak, *Quercus rubra*, various areas ; especially Hide-out-Holler' overlook

Southern Red Oak, *Quercus falcata*, Blanchard Campground etc.

Pin Oak, *Quercus palustris*, Prairie State Park; also a couple at Mammoth Springs (where surely introduced)

Blackjack Oak, *Quercus marilandica*,, "Hide-out-Holler" trail; Drury-Mincy Conservation Area Black Oak, *Quercus velutina*, all areas

Birch or Hazel Family (Betulaceae)

River Birch, Betula nigra, Buffalo River

American Hornbeam or Musclewood), *Carpinus caroliniana*, Blanchard area (smooth ropy bark) Eastern Hophornbeam, *Ostrya virginiana*, Roaring River; Blanchard area (rough bark)

Bladdernut Family (Staphyleaceae)

Bladder-Nut Family, Staphylea trifolia, Lost Valley; many other sites

Buckeye Family (Hippocastanaceae)

Ohio Buckeye, *Aesculus glabra*, Roaring River State Park and many other areas; common; Red Buckeye, *Aesculus pavia*, behind Skillet Restaurant at Ozark Folk Center; red flowers

Buckthorn Family (Rhamnaceae)

Carolina Buckthorn, *Rhamnus caroliniana*, Ruth and Paul Henning Conservation Area; Gunner Pool trail

Cashew Family (Anacardiaceae)

American Smoketree (*Cotinus obovatus*, Ruth and Paul Henning Conservation Area; along Sylamore Creek at Gunner Trail

Fragrant Sumac, Ruth and Paul Henning State Park; Gunner Pool; Sylamore campground Smooth Sumac, all areas

Poison Ivy, abundant everywhere (apparently one or two of you got a rash from some of it but (my theory) is that it I much less potent in spring; a very hot water shower on the affected area will eliminate the itching for 6-8 hours)

Cedar Family (Cupressaceae)

Eastern Red Cedar, Juniperus virginianus, all areas

Ash Juniper, *Juniperus ashei*, Ruth and Paul Henning Conservation Area; bluffs along Buffalo River etc.; multiple trunks that "stool" rather than growing with a single trunk; not sure we ever actually saw one of these trees (or pointed it out specifically)

Citrus Family (Rutaceae)

Hop Tree (Wafer-Ash), *Ptelea trifoliata*, Blanchard Campground bridge **Custard Apple Family (Annonaceae)**

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Pawpaw, Asimina triloba, Roaring River State Park; Lost Valley; Greer springs trail, etc. but we did not see any in flower

Dogwood Family (Cornaceae)

Rough-leaved Dogwood, *Cornus drummondii*, Blanchard Campground bridge; also Prairie State Park Eastern Flowering Dogwood, *Cornus florida*, throughout Ozarks but few in flower (mostly occurs in April)

Ebony Family

Persimmon, *Diospyros virginiana*, Prairie State Park Campground; Ruth and Paul Henning Conservation Area; Blanchard Campground

Elm Family (Ulmaceae)

Northern Hackberry, *Celtis occidentalis*, all areas and especially at Prairie State Park Southern Hackberry, *Celtis laevigata*, very similar to previous species but leaves with no toothed edges or only a few small teeth; one or two seen at Blanchard Campground morning walk Winged Elm, *Ulmus alata*, Ruth and Paul Henning Conservation Area etc; rocky areas Slippery Elm, *Ulmus rubra* (common everywhere); rough upper surface

American Elm, Ulmus americana, 1 pointed out near Hgwy 74 bridge over Buffalo River

Figwort Family (Scrophulariaceae)

Empress Tree (Paulownia), in flower in parking lot of hotel in Eureka Springs and Mammoth Springs; near the Beverage Shoppe at Mo.-Ark state line; other urban areas

Ginseng Family (Araliaceae)

Hercules' Club or Devil's Walking-Stick, *Aralia spinosa*, Blanchard area (seen from vehicle) Virginia Creeper, *Parthenocissus quinquefolia*, everywhere

wild grape, *Vitis* spp., common; none specifically identified to species; the commonest species are Summer Grape (*V. aestivalis*); Graybark Grape (*V. cinerea*); and Winter Grape (*V. vulpina*). Muscadine Grape may also have been seen.

Heath Family (Ericaceae)

Sparkleberry (Farkleberry), *Vaccinium arboreum*, Hide-out-Holler' and a few other dry rocky areas; I did not have point out this one

Deerberry (High bush Huckleberry), *Vaccinium stamineum*, a few flowering at Hide-out-Holler' Trail Low-bush Huckleberry, *Vaccinium pallidum*, Hide-out-Holler' trail (very common; less than ca. 15" high; seemed to have buds or immature berries)

Holly Family (Aquifoliaceae)

Possumhaw (Deciduous Holly), *Ilex decidua*, numerous places; pointed out in Blanchard Campground

Honeysuckle Family (Caprifoliaceae)

Buckbrush or Coral Berry, *Symphoricarpos orbiculatus*, Prairie State Park etc; all areas Common Elderberry, *Sambucus canadensis*, various places; not pointed out

Japanese Honeysuckle, Lonicera japonica, lots of areas throughout

Yellow Honeysuckle, *Lonicera dioica*, we saw some with yellow flowers on Hide-out-Hollow trail Southern Arrow-wood, *Viburnum dendatum*, walkway to Blanchard Springs; Gunner Trail Rusty Black Haw, Viburnum *rufidulum*, Roaring River State Park and other sites; shiny leaves and

reddish petioles; just about every forested trail we walked

Laurel Family (Lauraceae)

Spicebush, all forested areas; first noted at Roaring River State Park

Sassafras, all areas but only saplings

Leatherwood (Mezereum) Family, *Thymeleaceae*

Leatherwood, *Dirca palustris*, numerous areas (a smallish bush with extremely flexible branches; apparently very long-lived); Gunner trail; Greer Trail; Blue Spring trail etc.

Lily Family (Liliaceae)

Common Greenbrier Smilax rotundifolia

greenbrier sp., Similax spp.

Linden Family

American Basswood Tilia americana, Blanchard Spring foot trail

Magnolia Family (Magnoliaceae)

Yellow-Popular, Tulip Tree, *Liriodendron tulipifera*, 1 flowering at the Blanchard springs parking lot turn around

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Cucumber Magnolia (tree), *Magnolia acuminata*, Lost Valley; Gunner Trail etc. (not flowering) Umbrella Magnolia, *Magnolia tripetala*, Alum Cove State Park (large flowers and leaves) Southern Magnolia, *Magnolia grandiflora*, not native but planted in towns.

Maple Family (Aceraceae)

Box Elder, all areas (leaves like Poison Ivy but opposite, not alternate) Silver Maple, *Acer saccharinum*, Prairie State Park; towns; along Buffalo River Sugar Maple, *Acer saccharum*, widespread in bottomlands

Red Maple, Hide-out-Holler' Trail etc.; various other areas as well; a small tree

Mulberry Family (Moraceae)

Osage Orange, Maclura pomifera, Prairie State Park

Red Mulberry, *Morus rubra*, Lost Valley; Gunner etc. (a native species); rough upper leaf surface White Mulberry, *Morus alba*, widespread around settled areas and towns; Mammoth Spring

Pines Family (Pinaceae)

Short-leaf Pine, Pinus echinata, throughout Ozark highlands; native

Plane Tree Family (Platanaceae)

Sycamore, Platanus occidentalis, along rivers

Rose Family (Rosaceae)

Downy Serviceberry, *Amelanchier arborea*, various areas but especially Hide-out-Hollow trail Wild Plum, *Prunus americana*, Prairie State Park; forms thickets along ditch banks Black Cherry, Prairie State Park; various other reas but especially in prairie zone Multiflora Rose, introduced; widespread and common; flowering everywhere Blackberry, *Rubus* sp., in bloom along fence rows in Arkansas; tall canes to 6 feet or more Dewberry, *Rubus* sp., Prairie State Park; rambles mostly along the ground

Ninebark, *Physocarpus opulifolius*, just a few days short full lowering in sandy bank of Sylamore Creek (beautiful spotted flowers when in flower)

Sapodilla Family

Gum Bumelia, *Bumelia lanuginosa*, various areas; we noted one at Prairie State Park; common also at Ruth and Paul Henning conservation area near Branson; dry rocky areas

Black Gum, *Nyssa sylvatica*, many along Hide-out-Hollow trail; also just about all Ozark areas **Saxifrage Family (Saxifragaceae)**

Wild Hydrangea, humid, shady ravines; common especially along lower part of Green Springs trail and elsewhere; not in bloom

Missouri Gooseberry, Ribes sp., common everywhere, incl. Prairie State Park

Trumpet Creeper Family (Bignoniaceae)

Northern Catalpa, *Catalpa speciosa*, native to a few northeastern Arkansas counties; Blanchard etc. Trumpet Creeper, *Campsis radicans*, invasive

Walnut Family (Juglandaceae)

Mockernut Hickory, *Carya tomentosa*, along Greer trail (fragrant leaves; the leaves and petioles are fuzzy/hairy) and elsewhere; generally has larger leaflets than other hickories

Pignut Hickory, *Carya glabra*, Ruth & Paul Hemming conservation area; also along Gunner Pool trail and elsewhere; almost all leaves have only 5 leaflets (no other hickory here has so few leaflets except Shagbark Hickory but it is easily identified by its bark)

Black Hickory, *Carya texana*, dry upland forests such as Hide-out-Holler' where we saw several; an indicator of poor soil; I didn't specifically point out this one

- Bitternut Hickory, *Carya cordiformis*, widespread and common in humid Ozark valleys and along streams where the soil is moist; much less so on dry upland ridges; usually 7-9 leaflets that are virtually hairless; has bright yellow buds and rather tight finely reticulated bark; not pointed out
- Shagbark Hickory, *Carya ovata*, has shaggy bark and very large leaves (up to 24"); usually 7 leaflets. Lost Valley; this and Shellbark Hickory, *Carya laciniosa* are very similar and both occur in this area

Black Walnut, *Juglans nigra*, Hide-out-Holler' Trail (greenish leaf stems); Highway 74 bridge and other places; walnuts do not produce leaves until quite late in the spring

Butternut, *Juglans cinerea*, where we saw the two Cerulean Warblers there was one growing on the slope below us; someone asked about it; looks much like a Black Walnut but leaves usually have an end leaflet (Black Walnut doesn't) and bark is smoother and grayish (not dark and deeply fissured)

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Willow Family (Salicaceae)

Eastern Cottonwood, Prairie State Park Prairie Willow, *Salix humilis*, along creek in Prairie State Park

Tante whow, saux numuls, along creek in Flaine State Fark

Sandbar Willow, Salix exigua, and/or other willow spp, Buffalo River

Witch Hazel Family (Hamamelidaceae)

Common Witch Hazel, *Hamamelis virginiana*, Bee Creek (common); Blanchard; Buffalo etc.; riversides; has rather broad roundish leaves with wavy teeth; along streams and in forest

Vernal Witch Hazel, *Hamamelis vernalis*, a spring-blooming relative along Bee Creek; it has narrower leaves than previous species and we saw the tiny yellowish flowers; I think this one is commoner along streams

Sweet Gum, Liquidambar styraciflua, all forested regions; woody and spiky seed balls

<u>HERBACEOUS PLANTS IDENTIFIED;</u> (not a complete list and many plants were identified only to <u>genus</u>). As in the woody species, the taxonomy of many forms has changed. The taxonomy used here is that of most older but more widely used and popular guides.

Arum Family, Araceae,

Jack-in-the-Pulpit, Arisaema triphyllum, Lost Valley and most other Ozark areas

Barberry Family, Berberidaceae

May Apple, Podophyllum peltatum, all wooded areas

Aster (Sunflower) Family, Asteraceae,

Pussy's Toes, Antennaria plantaginifolia, all areas; Hide-out-Holler'; Gunner etc.

- Giant Ragweed, Ambrosia, roadsides (not flowering); Blanchard Campground
- Common Ragweed, *Ambrosia artemisifolia*, roadsides (not flowering); roadsides; parking lots; dissected leaf; also noted at Blanchard Campground
- Compass Plant, *Silphium laciniatum*, leaves present; Prairie State Park; Ruth & Paul Henning State Park; roadsides
- Prairie Dock, *Silphium terebinthinaceum*, glades; NF (plant with huge arrowhead leaves); roadsides Tickseed (Lance-leaf) Coreopsis, *Coreopsis lanceolata*, Mincy etc.; the commonest *Coreopsis* here; many

species of *Coreopsis* are generally difficult to separate and there were likely other species

- Ox-eye Daisy, *Chrysanthemum leucanthemum*, the "white daisies" along roadsides everywhere (alien) Daisy Fleabane (Prairie), *Erigeron annuus*, prairies/roadsides (long narrow leaves); Blanchard Spring parking lot
- Ashy Sunflower, *Helianthus mollis*, none in flower but this one is very common on tallgrass prairies; has a broad fuzzy and simple leaf; many young ones in Baker Prairie
- Potato Dandelion, *Krigia dandelion*, Prairie State Park; also seen in Lost Valley (the flower stems have NO leaves);

Dwarf Dandelion (or Two-flowered Cynthia), *Krigia biflora*, Roaring River; Lost Valley; Alum; Gunner; Greer etc; commonest in wooded areas (not prairie); has 1-2 clasping leaves mid-way on stems;

- Common Dandelion, *Taraxacum offficinale*, all areas
- Leaf-Cup, Small-flowered, *Polymnia (Smallanthus) canadensis,* many areas (not flowering); rather fuzzy stems and petioles with prominent toothed stipules at base of petioles
- Leafcup, Yellow, *Polymnia (Smallanthus) uvedalia,* (none in flower); roadsides; has large deep-cut leaf shape with points; lacks the leafy stipules at base of petioles that are prominent in previous sp.; abundant on roadsides especially at Bee Creek; also has large deep-cut leaf shape with pointed tip;
- Golden Ragwort, *Packera* (formerly *Senecio*) *pauperculus* or sp.?, prairies; narrow lanceolata-shaped leaves at base
- Prickly Sow-Thistle, *Sonchus asper* (prob. this species but certainly a *Sonchus*) one plant along Mammoth Springs (near first outlet); a prickly plant with leaves with basal lobes that clasp the stem and may be rather well-separated; very prickly

Yarrow, Achillea millefolium, Baker Prairie; roadsides (alien) etc.

Wingstem, Verbesina helianthoides, seen in several places; prominent "winged" stems; not flowering; called

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Frost Flower in Texas; a nice one was views along the Gunner Pool trail (almost in a little wash) *Preanthes* spp.. with odd triangular leaves (Lost Valley) *Eupatorium spp.*, Bonesets and Thoroughworts, several seen but none flowering

Bean Family, Fabaceae (Legumes)

Cream Wild Indigo, *Baptisia leucophaea*, Prairie State Park; Baker Prairie; I only saw a couple Tick Trefoil, Stick Tight, *Desmodium spp.*, common almost everywhere in woodland areas including Lost Valley; Alum Cove State Park; Greer etc (not in flower); I may not have pointed this one out Black Medick (small yellow clover), *Medicago lupulina*, roadsides; especially Prairie State Park Red Clover, *Trifolium pratense*, roadsides everywhere; a native of Europe White Clover, *Trifolium repens*, roadsides everywhere; a native of Europe

Crimson Clover, *Trifolium incarnatum*, planted in a wildlife food field along Bee Creek (a native of Europe) Wood Vetch, *Vicia caroliniana*, Bee Creekr (individual white blossoms)

Wild Bean, *Strophostylus sp.* low plant or vine that is prominent part of understory of several forested areas we visited. Not sure of ID of this one

Goat's Rue, *Tephrosia virginiana*, seen on the Prairie (esp. Sheldon L. Cook prairie); has pink and cream pea-like flowers; fuzzy leaves.

Bellflower Family, Campanulaceae,

- Large-flowered (or as very similar Perfoliate) Bellwort, *Uvularia grandiflora*, Lost Valley trail; Blanchard Spring etc.; has perfoliate leaves (slightly zig-zag stem goes through leaf); none of these were in flower; seen in many wooded humid areas; common
- Venus' Looking Glass, *Triodanis perfoliata*, Blanchard Campground (by the bridge with the Sedum); starshaped purple violet flowers and roundish clasping leaves

Birthwort Family, Aristolochiaceae,

Wild Ginger, Asarum canadense, Roaring River (flowering but the flowers hard to find!); moist woodlands

Borage (Forget-Me-Not) Family, Boraginaceae,

Wild Comfrey, Cynoglossum virginianum, Lost Valley; Gunner Pool trail; Greer Trail

Marbleseed, *Onosmodium molle*, photographed this along the Gunner Trail cliff area; pale green with droopy leaves and drooping coiled flower head that was not yet open; hairy-stemmed; not ID'd at time because I didn't know what it was

Buttercup Family, Ranunculaceae

Columbine, *Aquilegia canadensis*, Lost Valley; Gunner; Greer etc.; these are mostly red in color Leather Flower, *Clematis sp.* (prob. *pitcheri*) Blanchard Campground (near bridge); Gunner trail above Sylamore Creek ; one along Gunner had flowers but were not yet open

Carolina (Tall) Larkspur, *Delphinium exalatum*, Roaring River; Drury-Mincy and many other areas Round-lobed Hepatica, *Hepatica nobilis*, Lost Valley (not in flower but leaves distinctive)

- Early Buttercup, *Ranunculus fascicularis*, Prairie State Park (probably this species but not specifically identified to species)
- Buttercup, *Ranunculus spp.*, several seen daily but not identified to species; the common ones are Hispid Buttercup, *Ranunculus hispidus*; and Hooked Buttercup, *Ranunculus recurvatus*, normally common throughout Ozarks
- Rue Anemone, *Thalictrum thalictroides*, Roaring River and a few other sites; a small plant; several still blooming; has a whorl of about 6 leaves right below flower
- Meadow Rue, *Thalictrum sp. (dasycarpum* or *dioicum)*, Gunner Pool trail; a few quite tall plants with small mitten-like leaflets and small whitish flowers; drooping over in the rain
- White Baneberry or Doll's Eyes, *Acteae pachypoda*, none in flower but the compound, sharply toothed leaves are distinctive; Lost Valley, Gunner Pool trail; Greer springs trail

Cactus Family, Cactaceae,

Prickly Pear, Opuntia compressa, a few noted on arid cliffs on Buffalo river float

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Day-Flower Family, Commelinaceae,

Ohio Spiderwort, *Tradescantia ohiensis*, esp. prairies; also throughout Ozarks; blue flowers Ozark Spiderwort, *Tradescantia ozarkana*, Roaring River (white flowers that have more rounded sepals and petals than previous species and narrower leaves; not sure we saw this one on this trip

Dogbane Family, Apocynaceae,

Blue Star, *Amsonia ciliata*, one plant in flower at Ruth and Paul Henning conservation area; I saw one along roadside while driving toward Branson but couldn't stop; uncommon in Ozarks

Evening Primrose Family, Onagraceae,

- Showy Evening Primrose, *Oenothera speciosa*, patches of pink flowers on roadsides in many places and photographed by most of you when we stopped at the overlook en route to Lost Valley
- Cut-leaved Evening Primrose, *Oenothera laciniata*, one plant seen just after we crossed the low-water bridge across Sylamore Creek and started to enter the distant campground; rather low-growing and almost reclining plant with reddish stems; weedy.

Four-O-Clock Family, Nycctaginaceae

Wild Four-O-Clock, *Mirabilis nyctaginea*, 1 plant along banks of Mammoth Springs near the first spring exit; purplish-pink flowers in partial whorls and each flower in a five-lobed cup. I photographed this plant to be sure of ID.

Geranium Family, Geraniaceae

Carolina Cranesbill, *Geranium carolinianum*, I saw this one only along the Greer Spring trail (but surely it was elsewhere); very small pinkish flower and more toothed leaf

Wild Geranium, *Geranium maculatum*, Roaring River; Lost Valley and other sites; this one was common and has a large flower

Grass Family, Poaceae,

Big Bluestem, Andropogon gerardi, prairies; forms stools or clumps; at the Sheldon L. Cook prairie Broomsedge Bluestem, Andropogon virginicus, Prairie State Park;' Baker Prairie; Drury-Mincy Glade Giant Cane, Arundinaria gigantea, Bee Creek; Eleven Point and Current River (riverbanks) Fescue grass, Fescue sp. (prob rubra etc), roadsides where escaped everywhere Panic Grass, Panicum sp. some of this interesting looking grass along the Sylamore Creek Trail at Gunner Pool; it has little knobby seeds in a cluster at the top

Honeysuckle Family, Caprifoliaceae (see under woody plants also)

Japanese Honeysuckle, Lonicera japonica, common; flowering

Yellow Honeysuckle, Lonicera flava, semi-woody vine seen mainly along the Hide-out-Holler' trail



Yellow Honeysuckle, Hide-out-Holler' trail, near Compton, Arkansas. Photo: S. Hilty 2019

Honwort Family, Ceratopyllaceae

Coontail (Honwort), *Ceratophyllum demersum*, Mammoth Springs; common aquatic plant (one of about sixty spp.) unique to the cold water of Ozark spring branches

Iris Family, Iridaceae,

Crested Iris, *Iris cristata*, Lost Valley (but not with flowers); Alum Cove (none flowering); Greer Blue-eyed Grass, *Sisyrinchium (exile) campestre*, Prairie State Park

Lily Family, Liliaceae,

Wild Onion, *Allium c. var. canadense*, I think we saw this along Bee Creek road
False Garlic, *Nothoscordum bivalve*, Prairie State Park and very common; all of them in flower
Wild Hyacinth, *Camassia scilloides*, Prairie State Park; Baker Prairie (remarkable display at Baker)
Yellow Star Grass, *Hypoxis hirsute*, prairies etc; abundant at Prairie State Park etc.
Solomon's Seal, *Polygonatum biflorum*, Roaring River; Lost Valle; Gunner etc.
False Solomon's Seal, *Smilacina racemosa*, wooded areas; Roaring River; Bee Creek; Gunner trail; Greer; only a couple with flowers (of the dozens seen)
Green Trillium, *Trillium viridescens*, Roaring River; Lost Valley (sepals erect)
Purple Trillium, *Trillium recurvatum*, Lost Valley; sepals recurved (bent downward)
Spanish Bayonet *Yucca sp.*, cultivated in yards, cemetery at Falling Spring Fall; not native
Soapweed Yucca (or Arkansas Yucca), *Yucca glauca var. mollis*, roadside near Gunner Pool and Sylamore Creek; this one is native

Madder Family, Rubiaceae,

Long-leafed Bluet, *Hedyotis longifolia*, Hide-out-Hollow Trail; Gunner Trail and elsewhere; tiny white flowers with four petals and long thin leaves; we may have also seen Small Bluets, which are even smaller than *H. longifolia*

Least Bluets or Small Bluets, *Hedyotis crassifolia*, lawns; tiny flowers Bedstraw, *Galium aparine*, roaring River; Lost Valley; all areas Bedstraw (on the Prairie), *Galium obtusum*, Prairie State Park

Milkweed Family, Asclepiadaceae

Four-leaved Milkweed, *Asclepias quadrifolia*, Lost Valley; Alum Cove State Park; Gunner Trail etc. Common Milkweed, *Asclepias syriaca*, Prairie State Park but not yet in flower; mostly along roadsides where common; small flower are pinkish purple in dense clusters

Mint Family, Labiatae,

Ohio Horse Mint, *Blephilia ciliata*, Gunner trail; near the parking lot at Blanchard Springs); rings of flowers Bee Balm; or Horsemint; or Wild Bergamot, *Monarda russeliana*, Roaring River State Park; Gunner Pool; Lyre-leaved Sage, *Salvia lyrata*, Roaring River and everywhere else thereafter but surprisingly few flowering

Several other small mints were noted but not pointed out because they were not flowering; among them Dead Nettle, *Lamium purpureum*, and Henbit, *Lamium amplexicaule*,

Moonseed Family, Menispermaceae

Moonseed (Carolina Moonseed), *Menispermum canadensis* (?), Bee Creek (many here); Lost Valley; Gunner Trail; numerous places; a small vine; also called Moonvine.

Morning Glory Family, Convolvulaceae

Ipomoea sp. Possibly Wild Potato Vine (*I. pandurata*); I photographed this vine along the Gunner Trail (at far end after everyone turned back; unfortunately it had no flowers but leave shape and hairy/fuzzy vine with large opposite leaves suggests this species or a related one.

Mustard Family, Cruciferae (Brassicaceae)

Winter Cress or Yellow Rocket, *Barbarea vulgaris*, everywhere (yellow fields everywhere) Smooth Rock Cress, *Arabis laevigata*, I photographed this in Lost Valley and again at the Gunner Trail

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Field Cress (Pepper Grass), *Lepidium campestre*, tiny white flowers; prairies; roadsides; Prairie State Park
Shepard's Purse, *Capsella bursa-pastoris*, a few along roadsides at Prairie State Park
Dame's Rocket, *Hesperis matronalis*, tall purple flowering plants that escape from gardens; roadsides
Water Cress, *Nasturtium officinale*, strems and springs; tiny white flowers; Mammoth etc.
Pepper Grass (or Field Cress), *Lepidium campestre*, I pointed this one out along the trail in Prairie State
Park; but it is not a grass

Nettle Family, Urticaceae,

False Nettle, *Laportea canadensis*, Blue Spring trail (alternate leaves and looks much like Stinging Nettle but this one does not have stinging hairs)

Orchid Family, Orchidaceae

Spring Coral Root, *Corallorhiza wisteriana*, Roaring River trail (the burned upper trail). This is a saprophytic plant; does not flower every year. First one I've seen in Ozarks.



Spring Coral Root Orchid, Roaring River State Park. Photo: S. Hilty 2019

Oxalis or Wood Sorrel Family, Oxalidaceae

Yellow Wood Sorrel, *Oxalis stricta*, Prairie State Park and throughout trip Violet Wood Sorrel, *Oxalis violacea*, Prairie State Park and elsewhere throughout trip

Parsley Family, Umbelliferaceae (or Apiaceae),

Yellow Pimpernel, *Taenidia integerrima*, Roaring River State Park; delicate plant with 3-finely toothed leaflets; yellow carrot-like umbles; also Gunner Pool trail

Poison Hemlock, Conium) maculata, Bee Creek; has twice- or thrice-pinnate leaves

Rattlesnake Master, *Eryngium yuccifolium*, Baker Prairie (not flowering; yucca-like leaves)

Prairie Parsley, Polytaenia nuttallii, thick stems; common at Prairie State Park; thick stem; yellow umbels

Meadow Parsnip, *Thaspium trifoliatum*, thinner more delicate plant than previous; roadsides in Ozarks; also yellow umbels; this one is common

Spotted Cowbane/Water Hemlock, *Cicudta maculata*, recalls Poison Hemlock but has forked narrow leaves (not twice compound as in Poison Hemlock);

Phlox Family, Polemoniaceae,

Prairie Phlox, *Phlox divaricata*, prairies etc. (or maybe *P. pilosa;* this not identified beyond genus); pinkish Downy Phlox, *Phlox* sp. (prob. *pilosa* or *carolina*), the common one in Ozarks but there are surely others;

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some with pink flowers, other with bluish- to lilac-colored flowers Jacob's Ladder, *Polemomium reptans*, Bee Creek (some in flower); Lost Valley

Pink (Carnation) Family, Caryophyllaceae

Fire-pink, Silene virginica, seen in several areas including Hide-out-Holler' trail; Gunner and Greer

Plantain Family, Plantaginaceae,

- English Plantain, *Plantago lanceolata*, Baker Prairie and one or two other places; has fairly thin lanceolate basal rosette of leaves and very tall central spike with whorl of tiny flowers at tip; apparently not a native species
- Rugel's Plantain, *Plantago rugelii*, the common plantain with shiny broad leaves; grows along sidewalks, lawns, waste areas; very common

We also saw other unidentified Plantago

Pokeweed Family, Phytolaccaceae,

Pokeweed, *Phytolacca americana*, the only one I recall was on the trail around Mammoth Splrings; not flowering

Poppy Family, Papaveraceae,

Bloodroot, Sanguinaria canadensis, moist damp woodlands; Lost Valley (not flowering)

Primrose Family, Primulaceae,

Shooting Star, *Dodecatheon meadia*, Prairies (we saw a few at Prairie State Park; more at the Sheldon L. Cook memorial prairie; both pink and white ones

Purslane Family, Portulacaceae

Spring Beauty, Claytonia virginica, Prairie State Park, a few on our prairie walk (usually flowering earlier)

Rose Family, Rosaceae,

Five-finger Cinquefoil, *Potentilla simplex*, Prairie State Park Wild Strawberry, *Fragaria virginianum*, Prairie State Park; scattered places; white flowers

Saxifrage Family, Saxifragaceae,

Alumroot, *Heuchera americana*, cliffs; pointed out along Sylamore Creek while on the Gunner trail; small yellowish flower on tall stalks;; root has powerful astringent qualities; used in herbal medicine

Sedge Family, Cyperaceae

Plantain-leaved Sedge, Carex plantaginea, Lost Valley (common); also Greer trail; not pointed out.

Smartweed Family, Polygonaceae,

- Virginia Knotweed, *Polygonum virginianum*, Lost Valley; Gunner and at Greer; identification provisional; may be this or a related sp. (i.e. *P. persicaria*); has prominent dark thumb prints on center of leaves hence often called "Lady's Thumb" but none were in flower
- Curly Dock (or Sour Dock), *Rumex crispus*, leafy bases of these seen in almost all areas but not flowering; noted along roadsides and parking lots; waste areas

Snapdragon Family, Scrophulariaceae,

Indian Paintbrush, Castilleja coccinea, Prairie State Park (small numbers)

Wood Betony, Pedicularis canadensis, Roaring River; Lost Valley; Baker Prairie

Prairie Beard-Tongue, *Penstemon tubaeflorus*, Prairie State Park; beard-tongue sp., *Penstemon sp.*? elsewhere throughout Ozarks, probably *Penstemon tubiflorus/digitalis*

Woolly Mullein, *Verbascum thapsus*, Roaring River and many other areas (not flowering); an alien; really large fuzzy-soft leaves

Spurge Family, Euphorbiaceae,

Wood Spurge, Euphorbia commutata seen along Bee Creek; round leaves surround stem

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Stonecrop Family, Crassulaceae,

Widow's Cross, Sedum pulchellum, rock ledges at Lost Valley; Blanchard Campground; and Greer Spring

Touch-Me-Not Family, Balsaminaceae,

Jewel-Weed, Impatiens capensis, most wooded areas (not flowering)

Valerian Family, Valerianaceae,

Corn Salad, *Valerianella sp.*, Prairie State Park and other sites (tiny white flowers on delicate plant) Ozark Corn Salad, *Valerianella longiflora*. Blanchard campground (across stream in camping area); I had to look this one up. Flowers much larger than on the previous species.

Vervain Family, Verbenaceae,

Rose Verbena (Vervain), Verbena canadensis, Prairie State Park

Violet Family, Violaceae,

Canada Violet, *Viola canadensis*, Lost Valley; Gunner etc.; common in wooded areas; white flowers on stem that also has leaves; some already with seed heads at Lost Valley

Common Blue Violet, *Violet sororia*, roadsides and waste areas; common and invasive (as in my lawn) Bird's-foot Violet, *Viola pedata*, Prairie State Park (has yellow "eye"); one also on Hide-out-Holler' trail

Waterleaf Family, Hydrophyllaceae,

Woolen Breeches (Appendaged Waterleaf), *Hydrophyllum appendiculatum*, Roaring River; Lost Valley Virginia Waterleaf, *H. virginianum*, Roaring River; Lost Valley

Yam Family, Dioscoraceae,

Wild Yam, Dioscorea quaternata, woodlands (common throughout; opposite leaves usually 3-5 in whorls)

Ferns: seen at various times during the trip

See: Key, James S.1982. Field Guide to Missouri Ferns. Missouri Dept of Conservation.

Christmas Fern, *Polystichum acrostichoides*, almost all forested areas; large fronds in groups Ebony Spleenwort, *Asplenium platyneuron*, a few along trails; Lost Valley; small; a single black stem Maidenhair Fern, *Adiantum pedatum*, Lost Valley, Greer, etc.



Venus'-hair Fern (or Southern Maidenhair Fern), *Adiantum capillus-veneris*, hanging down beneath cliffs along Sylamore Creek; same genus as Maidenhair Fern;

Walking Fern, *Asplenium rhizophyllum*, Greer Springs (many on rocks) Smooth Cliff-break Fern, *Pellaea glabella*, we saw several of these small ferns along the cliff on the Gunner trail; I photographed to check ID; the blades (leaves) are simple and entire (no teeth) Lip-fern sp.. *Cheilanthes sp.*, common small fern on limestone cliff on Gunner trail was probably a Lip-ferns but I cannot "guess" further. Bracken Fern, *Pteridium aquilinum*, Alum Cove and elsewhere.

Alum Cove Natural Bridge, Arkansas. Photo: S. Hilty 2019

Broad beech Fern, *Thelypteris hexagonoptera*, common along Lost Valley trail; lowest pair of pinnae bent downward; rachis winged throughout