

Spring Survey of 5 grasslands at Pyramid State Park in Perry County, Illinois



Report by Christopher David Benda, M.S.

March 2019

A survey of 5 grasslands that may be used for field competition exercises at Pyramid State Park in Perry County, Illinois was performed on March 29th and 31st in 2019 (Figure 1.). The objective of the survey was to locate occurrences of plants because some may be harmful to dogs. One resource chronicling these plants of concern, often referred to as “mean seeds” is located at the url <http://www.meanseeds.com/resources/the-bad-grass-list/>.

All vascular plant species encountered in the 5 grasslands were recorded and the list, along with some floristic metrics, is provided (Table 1.). A total of 97 species were observed within the 5 fields (Fig 1-5.). These maps include locations of two plants that are included among the list of “mean seeds” that might be harmful to dogs.

Other plants that inhabit the fields are listed in the report and some may possibly be of concern to dog enthusiasts. This report attempts to inform the reader so that each individual can make his or her own decision regarding their participation in events held at the locations listed in the report. All dog owners, handlers, and participants should review the list of plants and endeavor to become educated with regard to “mean seeds” and make independent decisions regarding the safety of their animals. This report is descriptive in nature and neither its author nor the committee that commissioned it can guarantee the safety of any individual dog from harmful plants. It is impossible to certify any field as 100% clear of harmful plants; however, the providers of this report are confident that each field was surveyed intensively and pertinent information regarding harmless plants is provided.

At least two locations contained some plants of concern. Virginia Wild Rye (*Elymus virginicus*) was observed in small numbers in fields 1 and 3. Field 1 contains approximately 12 plants in a very small area and field 3 contains a 20ft x 20ft patch of approximately 100 plants. Nimblewill (*Muhlenbergia schreberi*) was also mentioned on one of the websites provided in the initial request and was observed on the NW edge of field 2. These locations are indicated on the maps provided. The areas not surveyed in field 5 were mowed at the time of the survey. Other areas in many of the fields contained dense stands of Common Reed (*Phragmites australis*).

Additionally, the maps contain the tracks the two botanists followed in each field. Another survey is planned for August 2019.

Note: It is impossible to guarantee that any of the harmful plants are not present in each field and the providers of this survey are not liable for any issues that may occur in these fields during the competition. However, we are confident that each field was adequately surveyed.

Pyramid State Park
3/31/2019
Practitioner: Chris Benda

Conservatism Metrics:

Total Mean C:	1.3
Native Mean C:	2.2
Total FQI:	12.8
Native FQI:	16.6
Adjusted FQI:	16.9
% C value 0:	51.5
% C value 1-3:	34
% C value 4-6:	14.4
% C value 7-10:	0
Native Tree Mean C:	2.4
Native Shrub Mean C:	2
Native Herbaceous Mean C:	2.2

Species Richness:

Total Species:	97	
Native Species:	57	58.80%
Non-native Species:	40	41.20%

Species Wetness:

Mean Wetness:	1.5
Native Mean Wetness:	0.4

Physiognomy Metrics:

Tree:	8	8.20%
Shrub:	7	7.20%
Vine:	1	1%
Forb:	64	66%
Grass:	16	16.50%
Sedge:	1	1%
Rush:	0	0%
Fern:	0	0%
Bryophyte:	0	0%

Duration Metrics:

Annual:	28	28.90%
Perennial:	58	59.80%
Biennial:	11	11.30%
Native Annual:	11	11.30%
Native Perennial:	42	43.30%
Native Biennial:	4	4.10%

Species:

Scientific Name	Native?	C	Physiognomy	Duration	Common Name
<i>Acer negundo</i>	native	1	tree	perennial	boxelder
<i>Achillea millefolium</i>	non-native	0	forb	perennial	common milfoil
<i>Agrimonia parviflora</i>	native	5	forb	perennial	swamp agrimony
<i>Alisma plantago-aquatica</i> v. <i>parviflorum</i>	native	2	forb	perennial	common water plantain
<i>Allium vineale</i>	non-native	0	forb	perennial	field garlic
<i>Ambrosia trifida</i>	native	0	forb	annual	giant ragweed
<i>Andropogon gerardii</i>	native	5	grass	perennial	big bluestem
<i>Andropogon virginicus</i>	native	1	grass	perennial	broom sedge
<i>Apocynum cannabinum</i>	native	2	forb	perennial	dogbane
<i>Arabidopsis thaliana</i>	non-native	0	forb	annual	mouse-eared cress
<i>Arenaria serpyllifolia</i>	non-native	0	forb	annual	thyme-leaved sandwort
<i>Asclepias syriaca</i>	native	0	forb	perennial	common milkweed
<i>Aster lateriflorus</i>	native	2	forb	perennial	side-flowering aster
<i>Barbarea vulgaris</i>	non-native	0	forb	biennial	winter cress
<i>Boehmeria cylindrica</i>	native	3	forb	perennial	false nettle
<i>Bromus inermis</i>	non-native	0	grass	perennial	hungarian brome
<i>Capsella bursa-pastoris</i>	non-native	0	forb	annual	shepherds purse
<i>Cardamine hirsuta</i>	non-native	0	forb	annual	hairy bitter cress
<i>Carex glaucoidea</i>	native	5	sedge	perennial	blue sedge
<i>Celtis occidentalis</i>	native	3	tree	perennial	hackberry
<i>Cerastium dubium</i>	non-native	0	forb	annual	three-styled chickweed
<i>Cirsium discolor</i>	native	3	forb	biennial	pasture thistle
<i>Cirsium vulgare</i>	non-native	0	forb	biennial	bull thistle
<i>Conium maculatum</i>	non-native	0	forb	biennial	poison hemlock
<i>Conyza canadensis</i>	native	0	forb	annual	horseweed
<i>Cornus drummondii</i>	native	2	shrub	perennial	rough-leaved dogwood
<i>Corydalis flavula</i>	native	5	forb	biennial	pale corydalis
<i>Daucus carota</i>	non-native	0	forb	biennial	queen annes lace
<i>Digitaria sanguinalis</i>	non-native	0	grass	annual	hairy crab grass
<i>Dipsacus laciniatus</i>	non-native	0	forb	biennial	cut-leaved teasel
<i>Dipsacus sylvestris</i>	non-native	0	forb	biennial	common teasel
<i>Draba brachycarpa</i>	native	2	forb	annual	whitlow grass
<i>Elaeagnus umbellata</i>	non-native	0	shrub	perennial	autumn olive
<i>Elymus virginicus</i>	native	4	grass	perennial	virginia wild rye
<i>Erigeron philadelphicus</i>	native	3	forb	perennial	marsh fleabane
<i>Eupatorium coelestinum</i>	native	3	forb	perennial	mistflower
<i>Galium aparine</i>	native	0	forb	annual	annual bedstraw
<i>Galium pedemontanum</i>	non-native	0	forb	annual	foothill bedstraw
<i>Geranium carolinianum</i>	native	2	forb	annual	carolina cranesbill
<i>Gleditsia triacanthos</i>	native	2	tree	perennial	honey locust
<i>Helianthus tuberosus</i>	native	3	forb	perennial	jerusalem artichoke

<i>Holosteum umbellatum</i>	non-native	0	forb	annual	jagged chickweed
<i>Juncus dudleyi</i>	native	4	forb	perennial	dudleys rush
<i>Juncus effusus v. solutus</i>	native	4	forb	perennial	common rush
<i>Juniperus virginiana</i>	native	1	tree	perennial	eastern red cedar
<i>Lactuca canadensis</i>	native	1	forb	biennial	wild lettuce
<i>Lamium amplexicaule</i>	non-native	0	forb	annual	henbit
<i>Lepidium virginicum</i>	native	0	forb	annual	common peppergrass
<i>Lespedeza cuneata</i>	non-native	0	forb	perennial	silky bush clover
<i>Lonicera japonica</i>	non-native	0	vine	perennial	japanese honeysuckle
<i>Lonicera maackii</i>	non-native	0	shrub	perennial	amur honeysuckle
<i>Lotus corniculatus</i>	non-native	0	forb	perennial	birdsfoot trefoil
<i>Medicago lupulina</i>	non-native	0	forb	annual	black medick
<i>Medicago sativa</i>	non-native	0	forb	perennial	alfalfa
<i>Muhlenbergia schreberi</i>	native	0	grass	perennial	nimblewill
<i>Oenothera biennis</i>	native	1	forb	biennial	evening primrose
<i>Oxalis stricta</i>	native	0	forb	perennial	tall wood sorrel
<i>Panicum capillare</i>	native	0	grass	annual	old witch grass
<i>Panicum virgatum</i>	native	4	grass	perennial	prairie switch grass
<i>Phragmites australis</i>	native	1	grass	perennial	common reed
<i>Phytolacca americana</i>	native	1	forb	perennial	pokeweed
<i>Plantago lanceolata</i>	non-native	0	forb	perennial	english plantain
<i>Platanus occidentalis</i>	native	3	tree	perennial	buttonwood
<i>Poa pratensis</i>	non-native	0	grass	perennial	kentucky blue grass
<i>Populus deltoides</i>	native	2	tree	perennial	eastern cottonwood
<i>Potentilla simplex</i>	native	3	forb	perennial	common cinquefoil
<i>Pycnanthemum tenuifolium</i>	native	4	forb	perennial	slender mountain mint
<i>Quercus palustris</i>	native	4	tree	perennial	pin oak
<i>Ranunculus abortivus</i>	native	1	forb	annual	little-leaf buttercup
<i>Rhus copallina</i>	native	3	shrub	perennial	dwarf sumac
<i>Rhus glabra</i>	native	1	shrub	perennial	smooth sumac
<i>Rosa multiflora</i>	non-native	0	shrub	perennial	japanese rose
<i>Rubus allegheniensis</i>	native	2	shrub	perennial	common blackberry
<i>Rumex verticillatus</i>	native	5	forb	perennial	swamp dock
<i>Salix nigra</i>	native	3	tree	perennial	black willow
<i>Schizachyrium scoparium</i>	native	5	grass	perennial	little bluestem
<i>Setaria glauca</i>	non-native	0	grass	annual	pigeon grass
<i>Solidago canadensis</i>	native	1	forb	perennial	canada goldenrod
<i>Sonchus arvensis</i>	non-native	0	forb	perennial	field sow thistle
<i>Sorghastrum nutans</i>	native	4	grass	perennial	indian grass
<i>Sporobolus asper</i>	native	3	grass	perennial	rough dropseed
<i>Stellaria pallida</i>	non-native	0	forb	annual	sand chickweed
<i>Taraxacum officinale</i>	non-native	0	forb	perennial	common dandelion
<i>Thlaspi arvense</i>	non-native	0	forb	annual	field penny cress
<i>Tridens flavus</i>	native	1	grass	perennial	common purpletop
<i>Trifolium repens</i>	non-native	0	forb	perennial	white clover

<i>Triticum aestivum</i>	non-native	0	grass	annual	wheat
<i>Typha angustifolia</i>	non-native	0	forb	perennial	narrow-leaved cattail
<i>Valerianella radiata</i>	native	1	forb	annual	corn salad
<i>Verbascum thapsus</i>	non-native	0	forb	biennial	woolly mullein
<i>Verbena hastata</i>	native	3	forb	perennial	blue vervain
<i>Vernonia gigantea</i>	native	4	forb	perennial	tall iron weed
<i>Veronica arvensis</i>	non-native	0	forb	annual	corn speedwell
<i>Veronica peregrina</i>	native	0	forb	annual	purslane speedwell
<i>Vicia dasycarpa</i>	non-native	0	forb	annual	woolly-pod vetch
<i>Viola rafinesquii</i>	non-native	0	forb	annual	wild pansy
<i>Xanthium strumarium</i>	native	0	forb	annual	cocklebur

Figure 1. Field 1 at Pyramid State Park.

Fields at Pyramid State Park

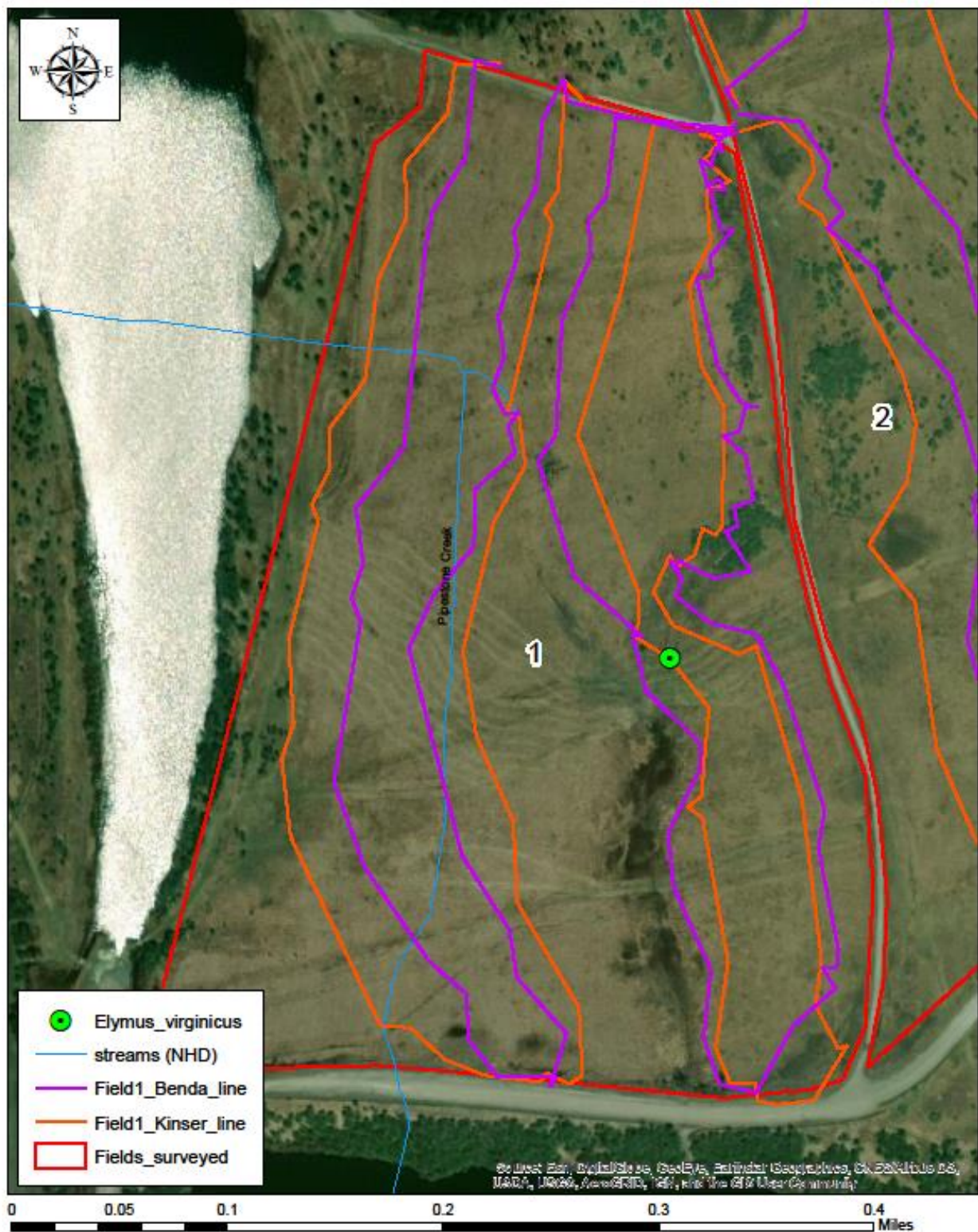


Figure 2. Field 2 at Pyramid State Park.

Fields at Pyramid State Park

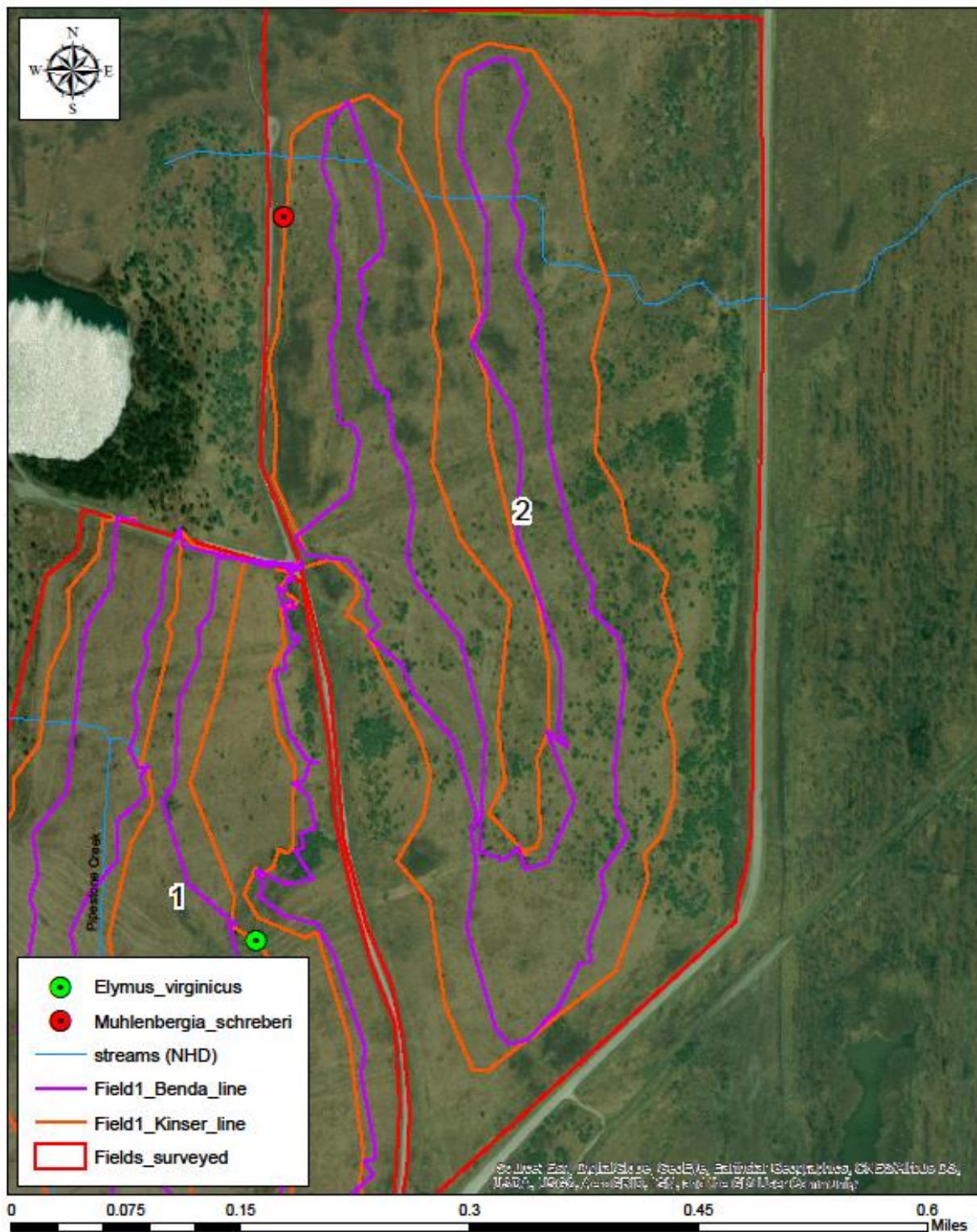


Figure 3. Field 3 at Pyramid State Park.

Fields at Pyramid State Park

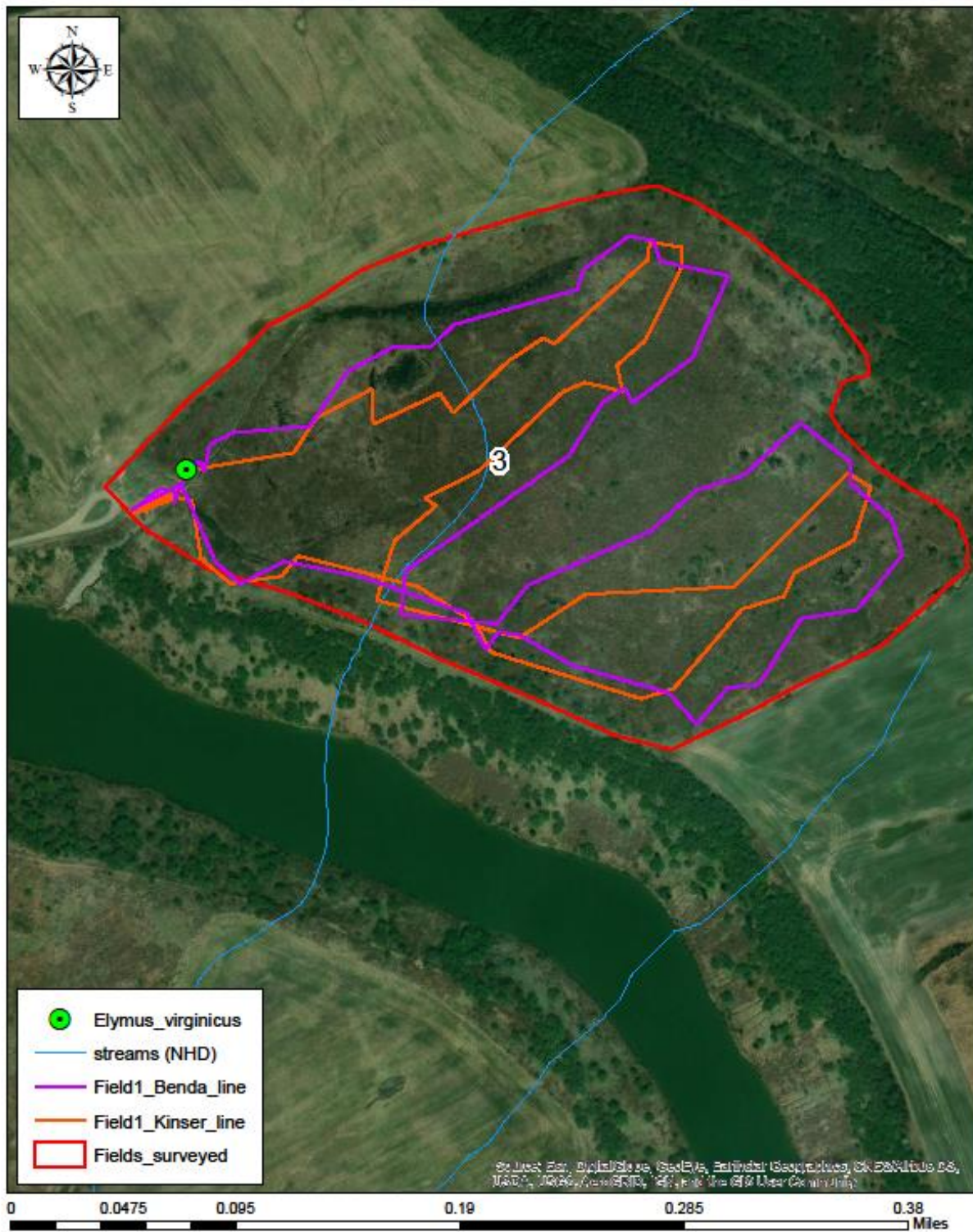


Figure 4. Field 4 at Pyramid State Park.

Fields at Pyramid State Park

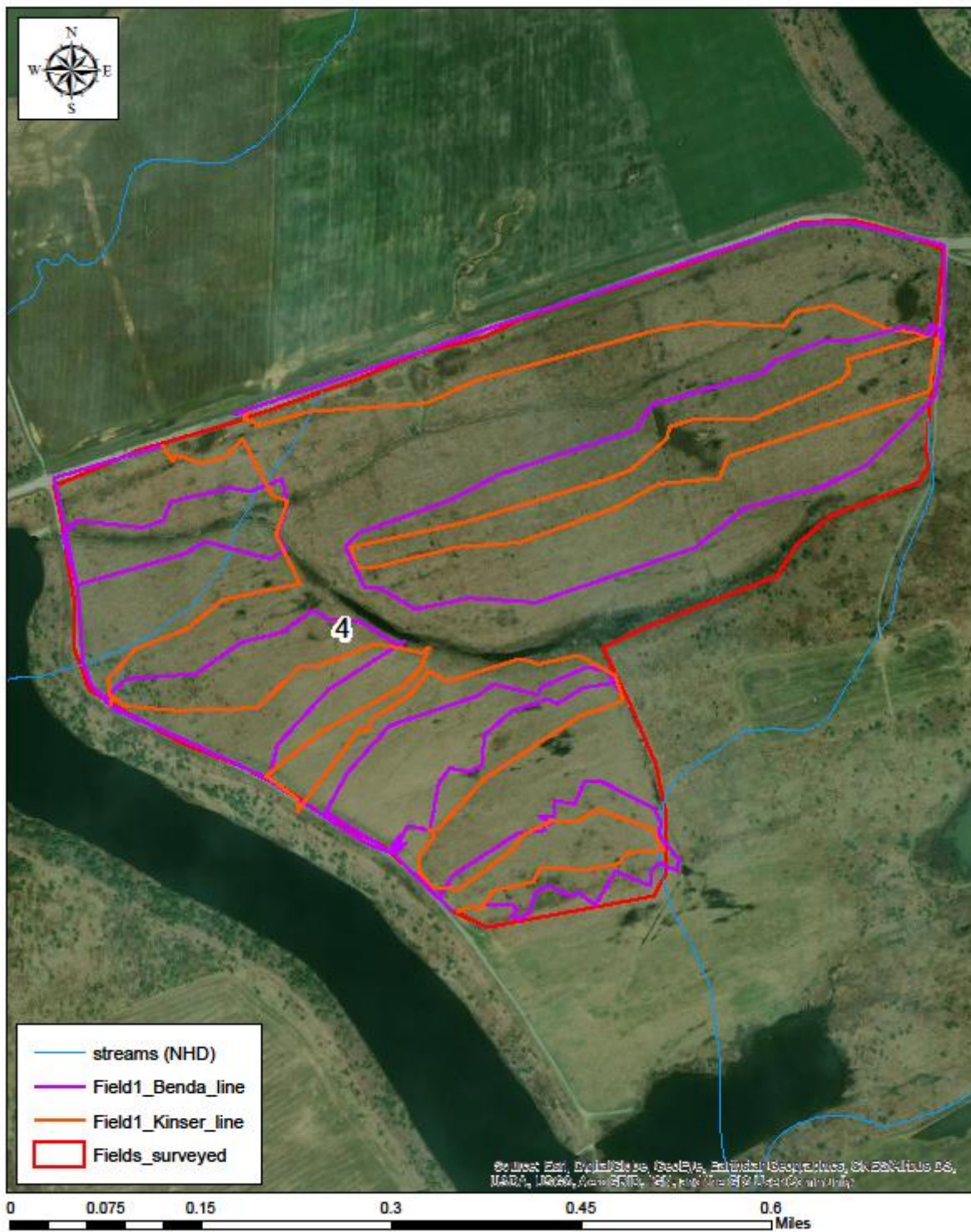


Figure 5. Field 5 at Pyramid State Park.

Fields at Pyramid State Park

