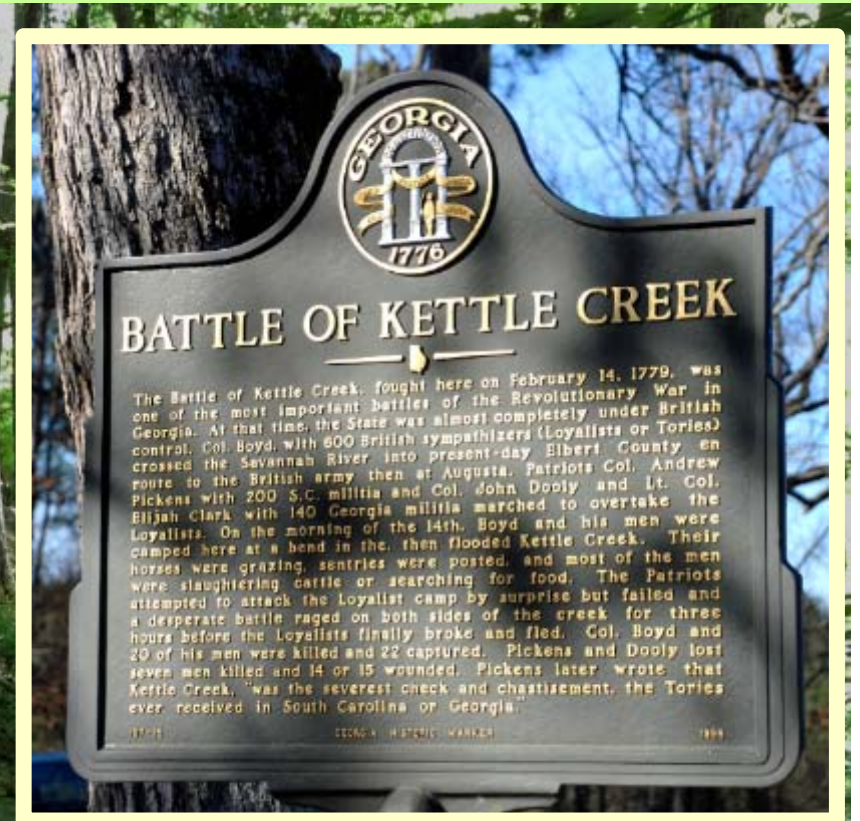


Kettle Creek Battlefield

A Hidden Botanical
Jewel in the
Georgia Piedmont



A photograph of a dirt road leading through a stone gate into a wooded area. The gate is made of stone pillars and a metal gate. The road is muddy and leads into a dense forest of green trees.

**THANKS to Kettle Creek Battlefield Assoc.
for funding this project!**

Thanks to photographers!

Hugh and Carol Nourse
Alan Cressler
Lee Shearer
Jan Coyne

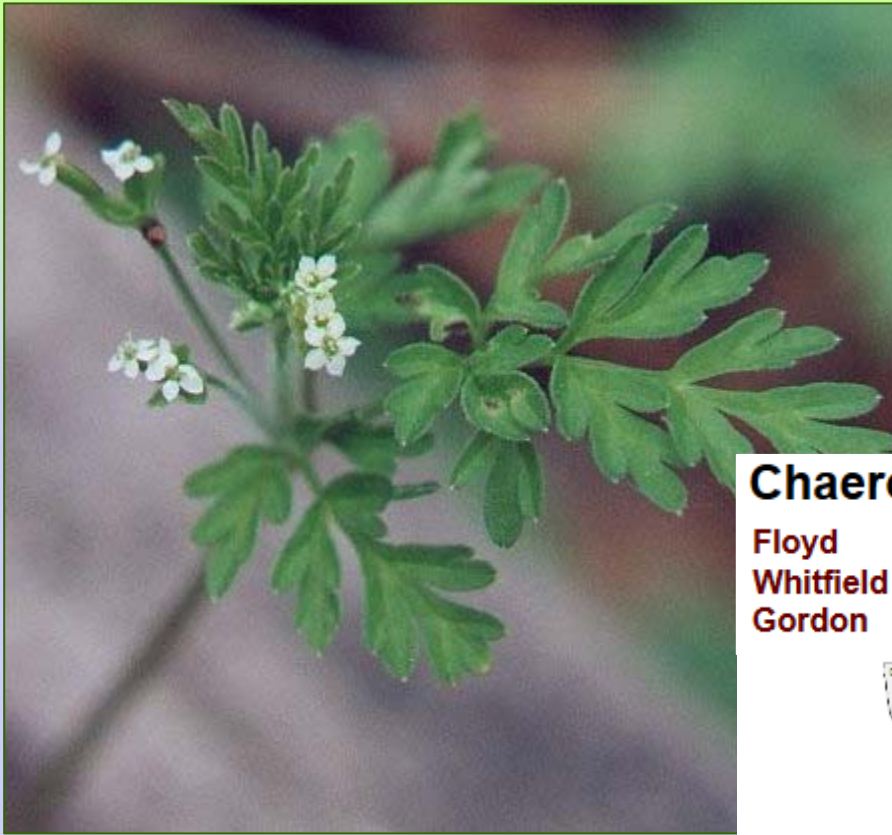
How this
all began ...

**Georgia
Botanical
Society ~**

**Field Trip
10 May 2014**

Shagbark Hickory



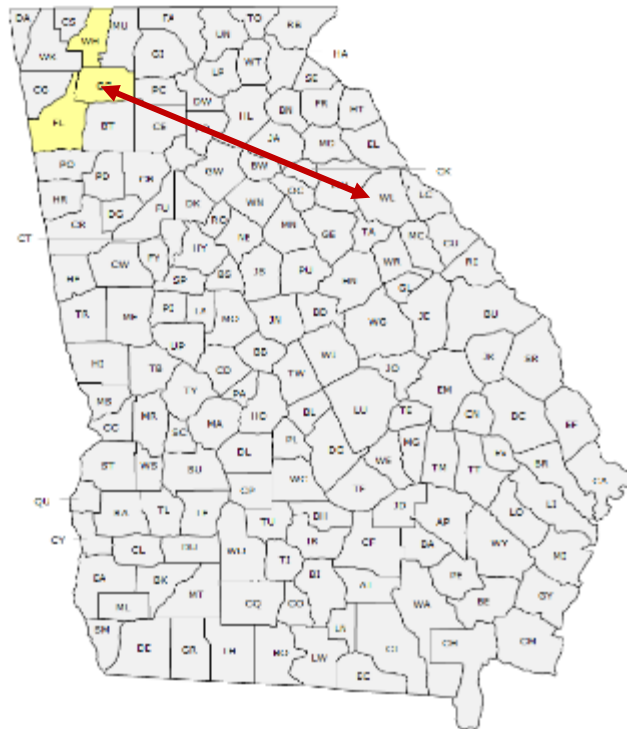


Spreading Chervil

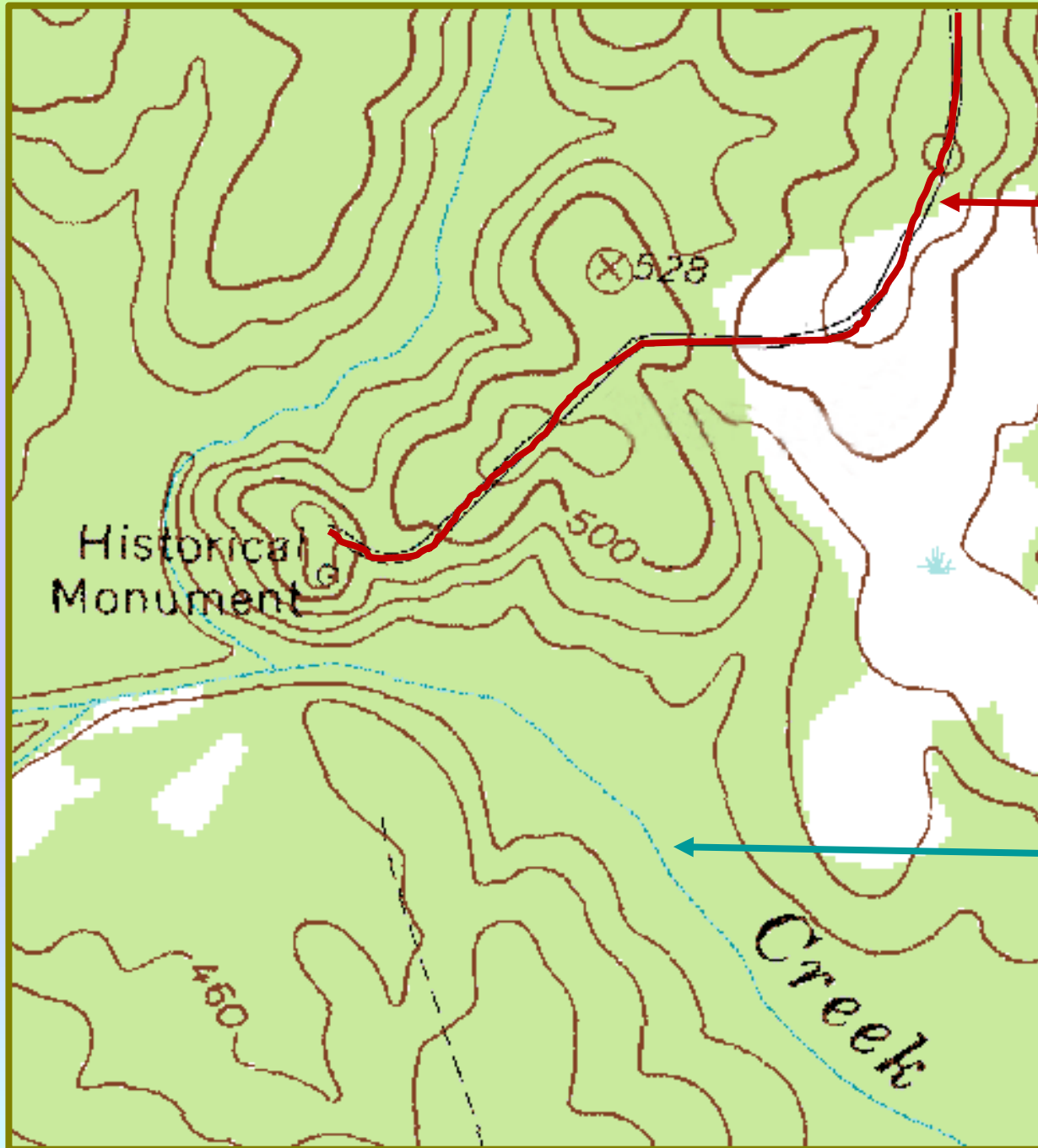
From Wilkes County to
Gordon County is more than
160 miles and in a different
ecoregion!

Chaerophyllum procumbens

Floyd
Whitfield
Gordon

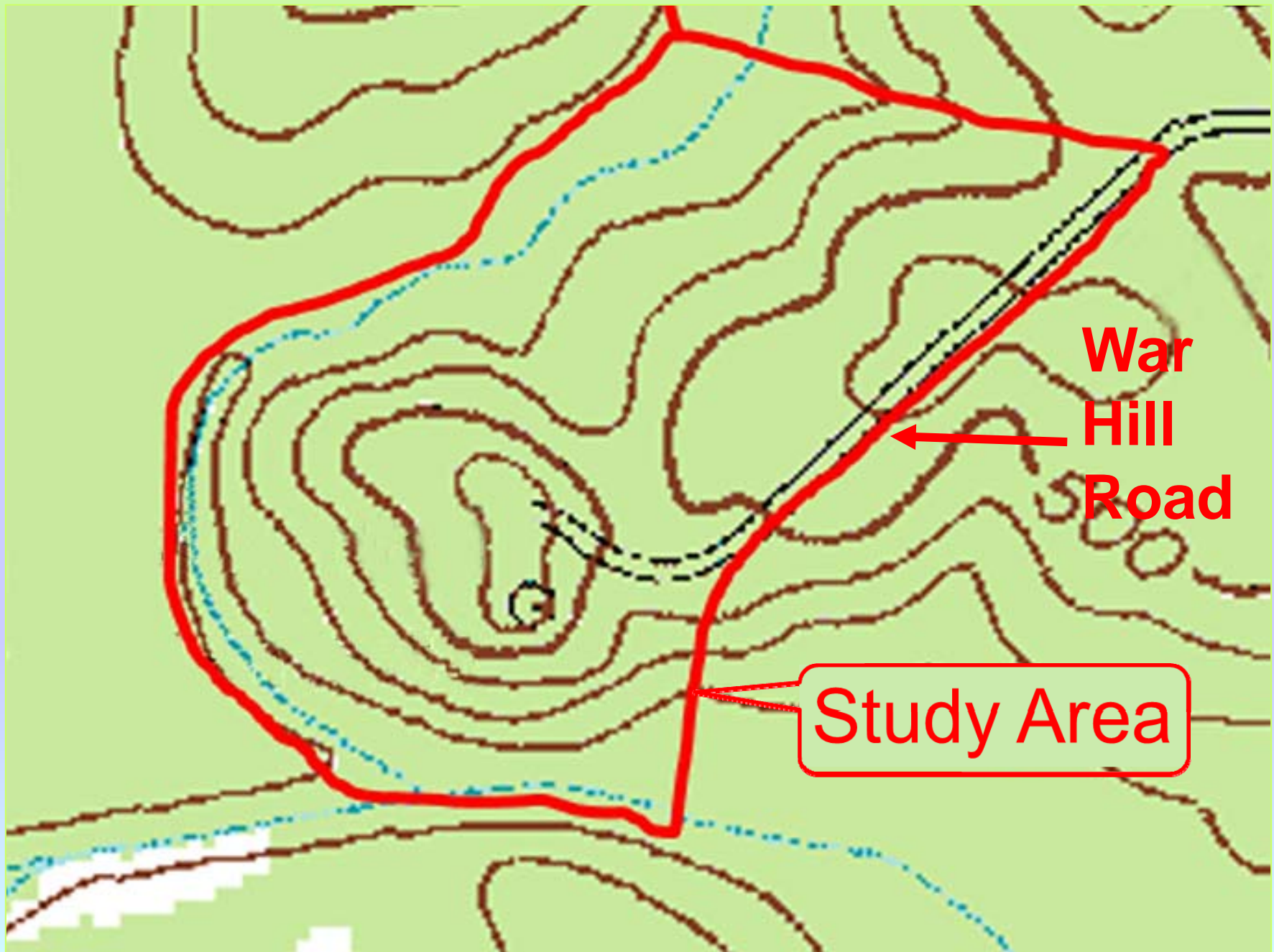


Map from
UGA's
"Atlas of the
Vascular
Plants of
Georgia"



War Hill Road

Kettle Creek



War
Hill
Road

Study Area

Goals of the Project:

Document all the plants growing within the 14-acre core area of Kettle Creek Battlefield

Determine the types of natural communities within the study area

Create a collection of **voucher** plant specimens:
pressed, dried, and mounted examples of all the
plant species occurring within the study area



PLANTS OF GEORGIA

POACEAE

Andropogon ternarius Michaux
Splitbeard Bluestem

Wilkes County: Kettle Creek Battlefield, War Hill Road,
12 miles southwest of Washington, approx 33.69161229N /
-82.88464464W. Clarke's Summit, northeast of War Hill
and west of War Hill Road; dry woods on southwest-facing
slope, with *Pinus taeda*, *Juniperus virginiana*, *Quercus*
stellata, *Celtis tenuifolia*, and *Ulmus alata*.

Linda G. Chafin s.n.

14 May 2015

UNIVERSITY OF GEORGIA HERBARIUM

Athens, Georgia

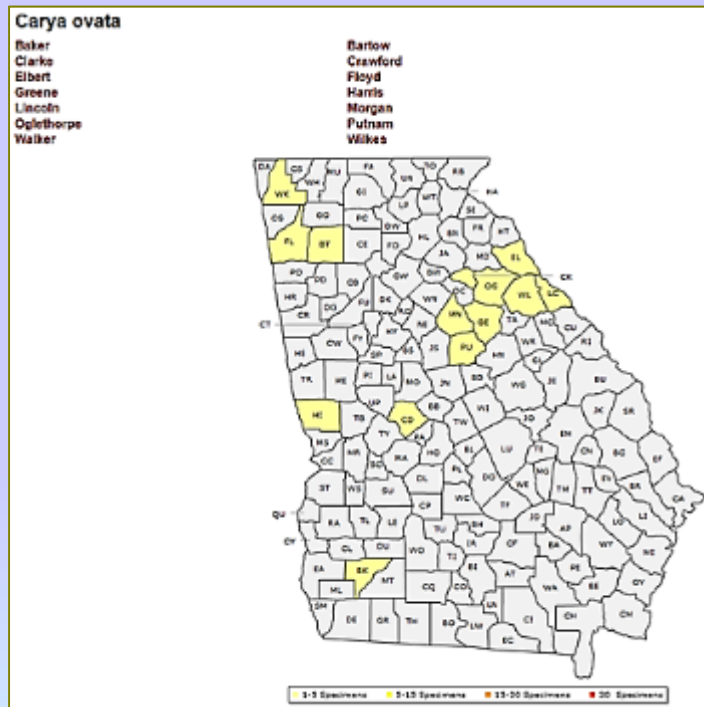
A project of the Kettle Creek Battlefield Association,
Inc., Washington, Georgia



Two more goals of the project

Determine what percent of KCB plants had never been documented in Wilkes County

Determine what percent of KCB plants are “calciphiles” – calcium-loving plants



University of Georgia Herbarium website
“Atlas of Vascular Plants of Georgia” –
County maps for more than 4000 species.



Amphibolite bedrock – high in calcium, magnesium, and iron – raises the pH of the soils that form from it.



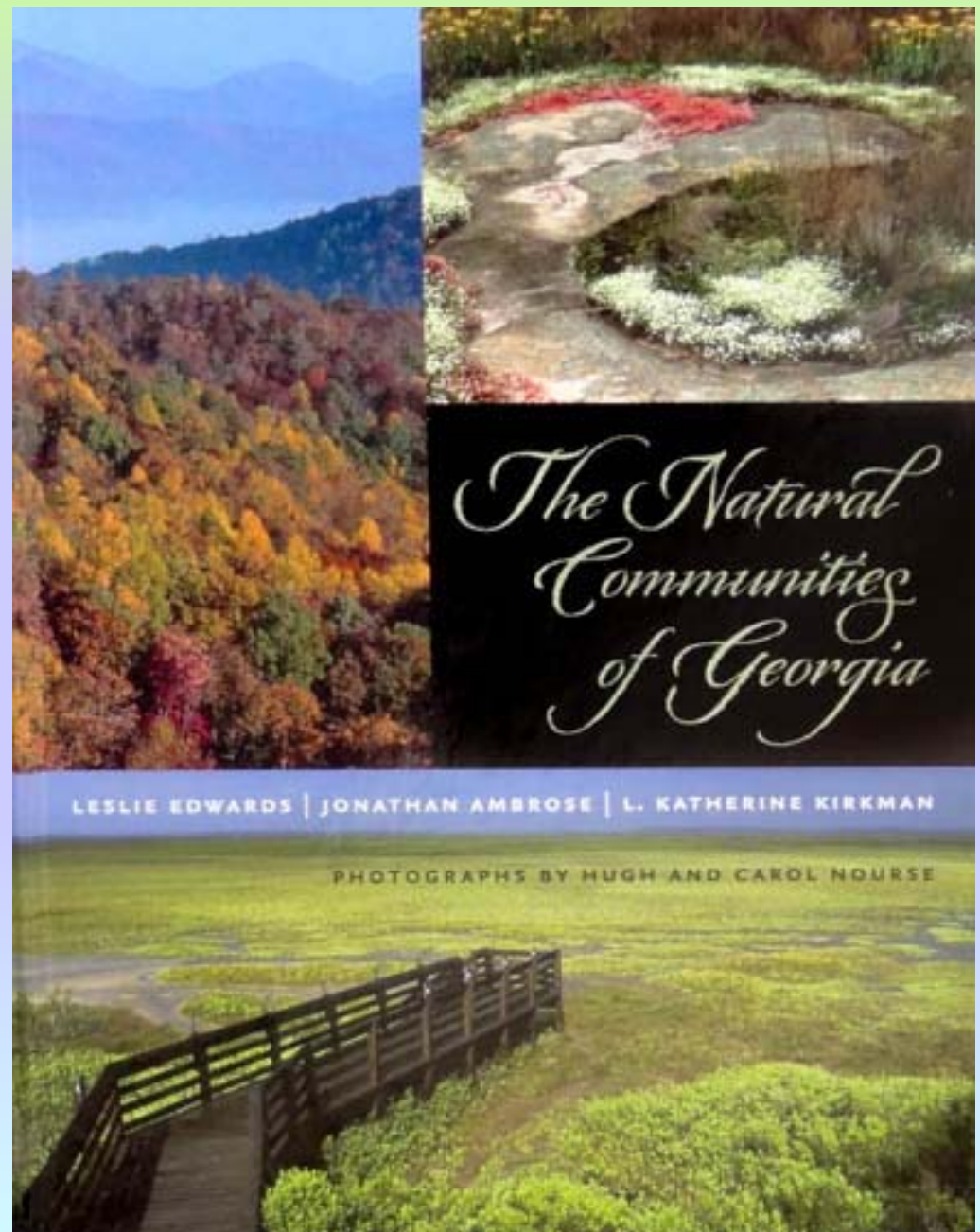
What we found out....

- ❖ Total plant species observed at KCB: 332+
- ❖ Calcium-loving plant species: 42 (13%)
- ❖ Plant species new to Wilkes County: 240 (72%)
- ❖ Exotic, *invasive pest* plant species: 3 (<1%)
- ❖ Plant specimens collected & pressed: ~ 500
- ❖ Natural Communities or habitats: 5

The Natural Communities of Georgia

At KCB:

**Mesic Forest
Oak-Pine-Hickory Forest
Piedmont Prairie
Floodplain Forest
Disturbed Areas**





Mesic (moist) Forest: War Hill north-facing slopes, lower slopes, and toe slopes of other aspects

Of the 50 native tree species at KCB,
22 occur on the north-facing mesic slopes!

American Elm

Beech

Bitternut Hickory

Black Gum

Black Walnut

Dogwood

Florida Maple

Hop Hornbeam

Ironwood

Loblolly Pine

Mockernut Hickory

Pignut Hickory

Red Maple

Redbud

Shagbark Hickory

Sourwood

Sweet Gum

Sycamore

Tulip Tree

Water Oak

White Ash

White Oak

**Mesic Forest: signature
calciphile species is...**

Black Walnut

Juglans nigra





Oak-Pine-Hickory Forest: War Hill south- and west-facing slopes, upper slopes of other aspects, and top of the hill

Oak – Pine – Hickory Forest: signature calciphile species is...



Shagbark
Hickory
Carya ovata



Oak-Pine-Hickory Forest at KCB

Post Oak
Southern Red Oak
White Oak

Loblolly Pine
Shortleaf Pine

Mockernut Hickory
Pignut Hickory
Sand Hickory
Shagbark Hickory - C

Florida Maple - C
Hop Hornbeam - C



**Rock outcrop on
south-facing slope of War Hill**

Piedmont Prairie: pocket-sized grasslands





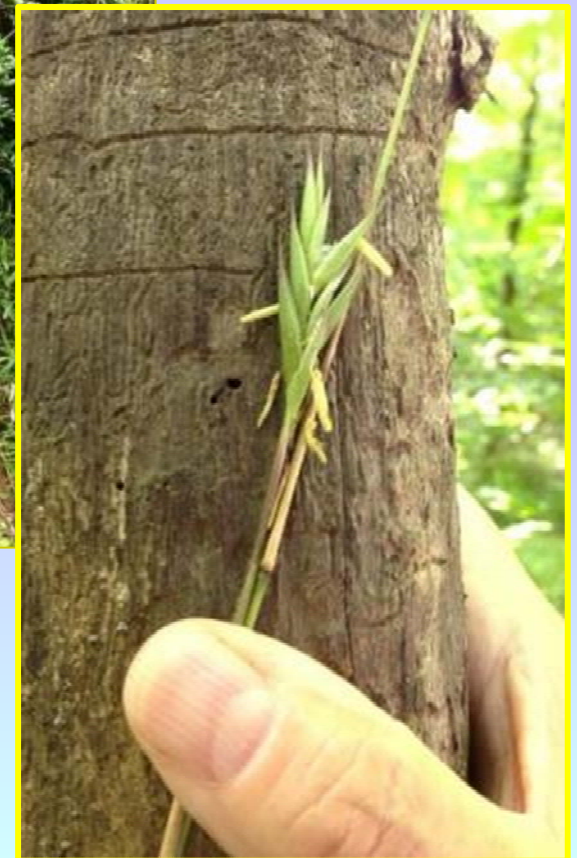
Floodplains of Kettle Creek and Kelly Branch



River Cane
Arundinaria
gigantea

River Cane flowers
once in 50 – 100 yrs

Canebrakes – a lost southern plant community first described by William Bartram as “vast meadows.” Estimated at 12 million acres – now reduced by 95%.





Floodplain Forest:
signature calciphile
species is...

Tall Pawpaw

Asimina triloba



Disturbed Areas at KCB: Roadsides and ditches, parking areas, pine plantation



Butterfly Pea



Silver Plume Grass



Large-flowered Tick-seed



Sundrops

Early Spring.... Bloodroot

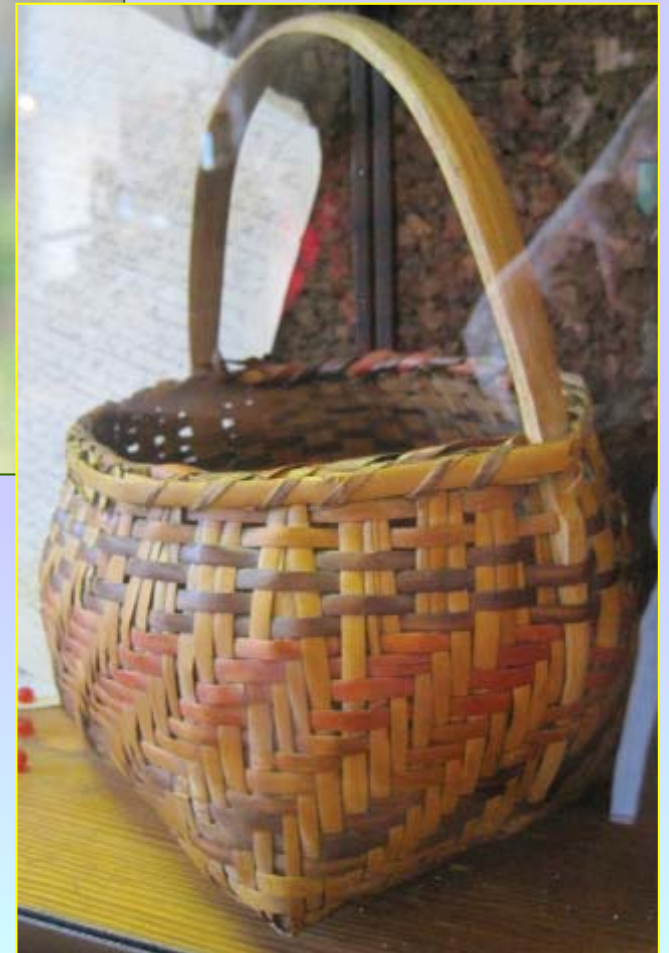


Sanguinaria canadensis, Poppy Family



Rhizome and roots of Bloodroot

Cherokee Indian
basket dyed with
Bloodroot sap



Two more early spring bloomers



Windflower
Thalictrum thalictroides



Hepatica
Anemone americana

Find of the year – March 17!

Spring Coral-root

Corallorhiza wisteriana
Orchid Family



NO leaves or other photosynthetic tissues!

High Spring: April and May



Toadshade Trillium
Trillium cuneatum

Trillium rhizome – underground stem may live more than 100 years!

More flowers of high spring!



Indian-pink
Spigelia marilandica



Rain-lily
Zephyranthes atamasca

Spring in the Piedmont Prairie



Trailing Phlox
Phlox nivalis



Fire Pink, *Silene virginica*



Spotted Phacelia
Phacelia maculata



Hairy Spiderwort
Tradescantia hirsuticaulis

Early Summer in the Mesic Forest



Climbing Milkvine
Gonolobus suberosus



Carolina Milkvine
Matelea caroliniensis

Mid-Summer along sunny roadsides



Sensitive Briar
Mimosa microphylla

Passion Flower
Passiflora incarnata



Late Summer and Fall: Grasses and Goldenrods



Purple-Top Love Grass
Eragrostis spectabilis



Splitbeard Bluestem
Andropogon ternarius



Gray Goldenrod
Solidago nemoralis

Thanks to my field assistant friends



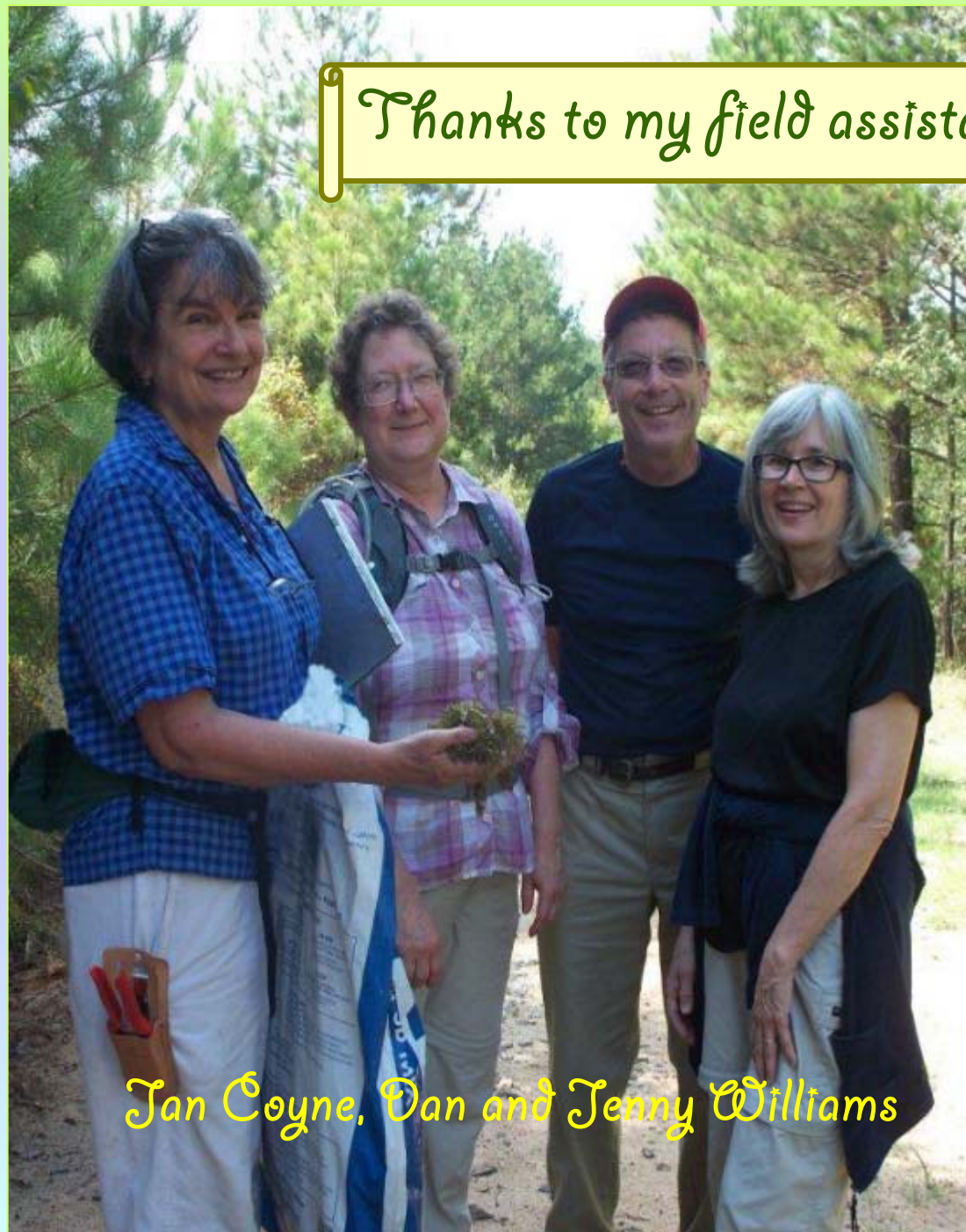
Lee Shearer



Bruce Sorrie



Anne Brightwell

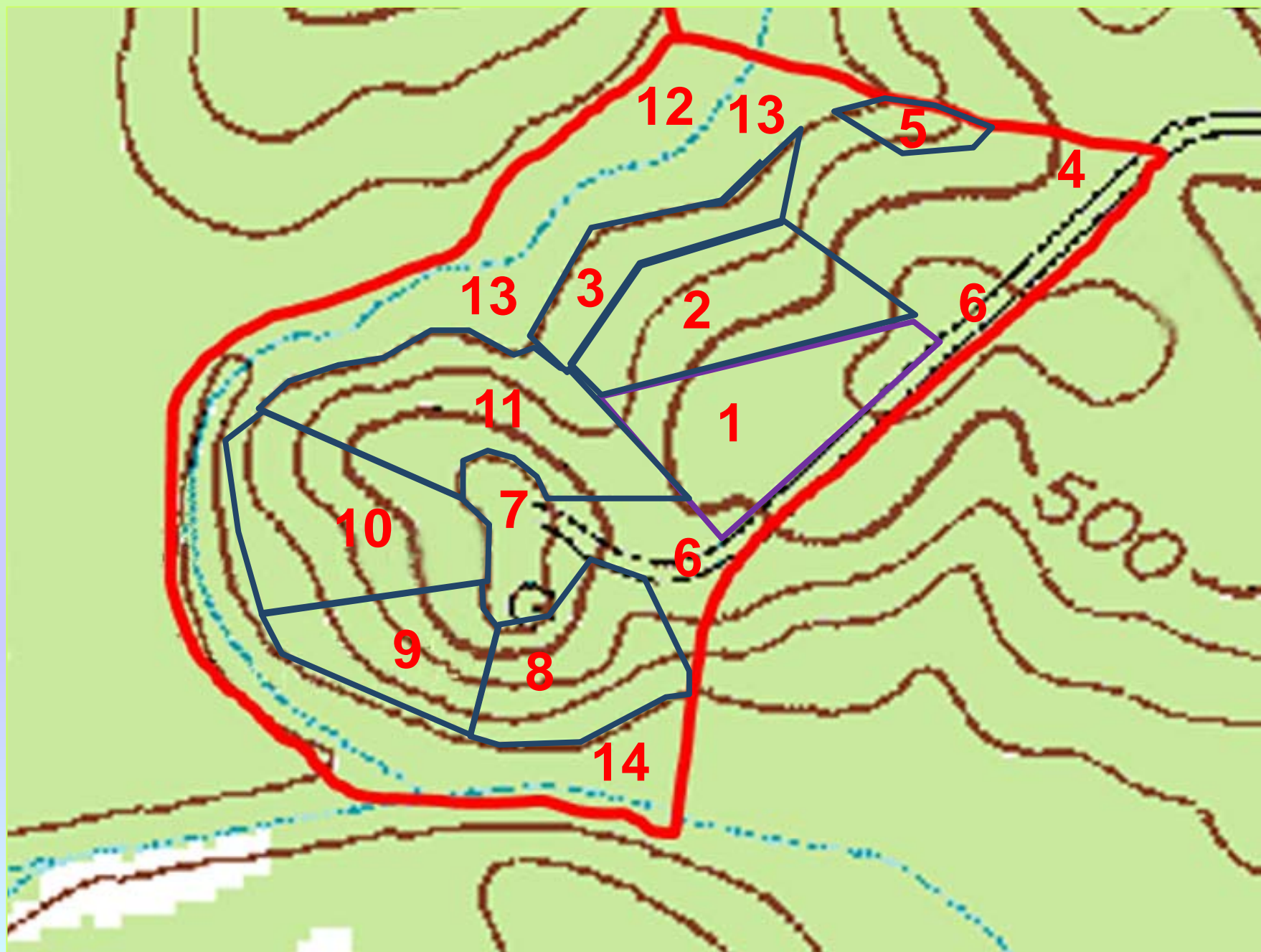


Jan Coyne, Dan and Jenny Williams

The background of the slide is a photograph of a lush, green forest. There are many trees and bushes with vibrant green leaves. The lighting is natural, suggesting daylight. The text 'The End' is overlaid in a large, yellow, serif font in the upper center. Below it, a yellow scroll-like box contains a message of thanks in a green, italicized serif font.

The End

*Many thanks to Dr. Joe Harris and the
Kettle Creek Battlefield Association for
their interest and support!*



Aerial View of Kettle Creek Battlefield



