



# Fig Buttercup Project

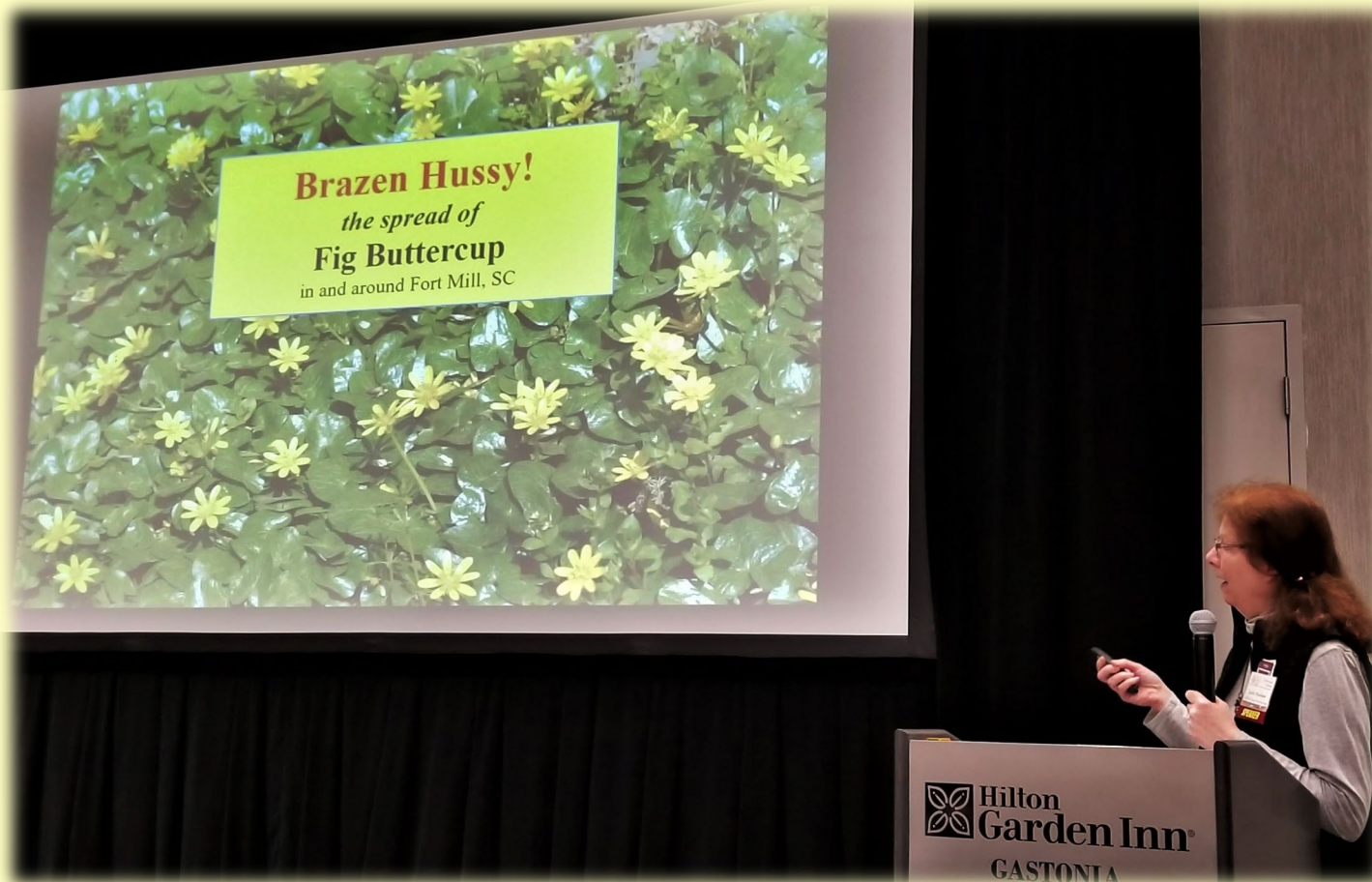


**Johnny Randall**  
Director of Conservation



- With contributions from**
- Emma Rast (2020-21 intern)
  - Andie Kolarova (2021-22 intern)
  - Julie Tuttle
  - Ann Prince (RIP)
  - Bob Gale
  - Pete Schubert
  - Rich Shaw
  - Perry Sugg
  - George Morris
  - And others!

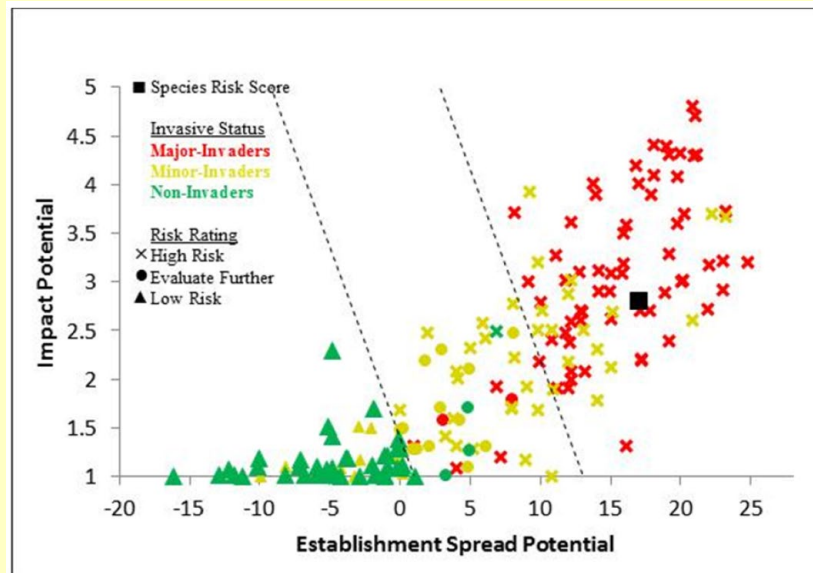
# NC-IPC & SC-IPC conference (2019)




Janie Marlow and the conference signature cocktail



# Risk assessment and spread





**Figure 2.** *Ficaria verna* risk score (black box) relative to the risk scores of species used to develop and validate the PPQ WRA model (other symbols).






**United States Department of Agriculture**

United States Department of Agriculture  
Animal and Plant Health Inspection Service  
August 12, 2015  
Version 1

## Weed Risk Assessment for *Ficaria verna* Huds. (Ranunculaceae) – Fig buttercup



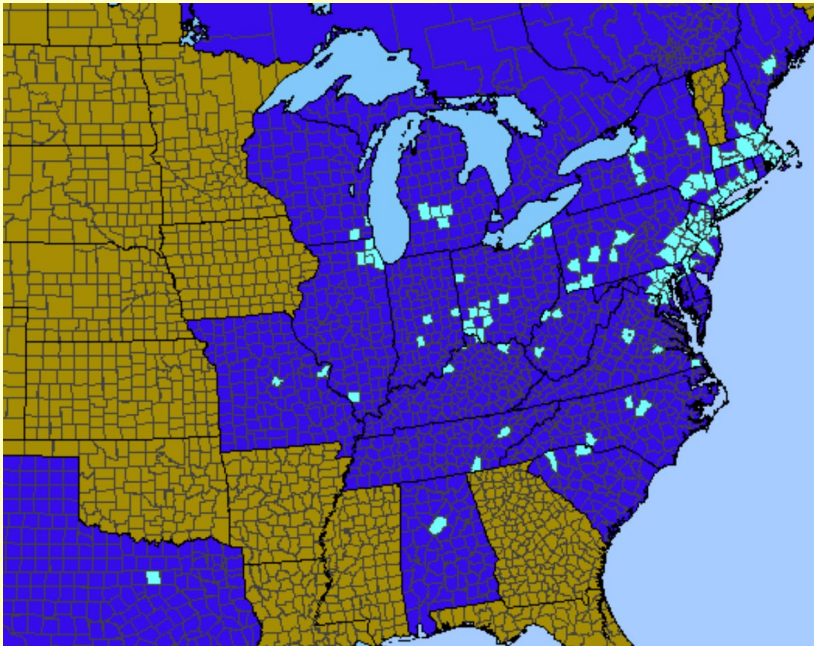
Top: *Ficaria verna* infestation and plant habit (source: Sylvan Kaufman). Middle: Aerial bulbils at the bases of plant leaves, and underground tubers (source: Leslie J. Meluhoff, University of Connecticut, Bugwood.org). Bottom: Infestation at a local park near Washington, D.C. (source: Spencer Johnson, Invasive Plant Control, Inc.).

**Agency Contact:**

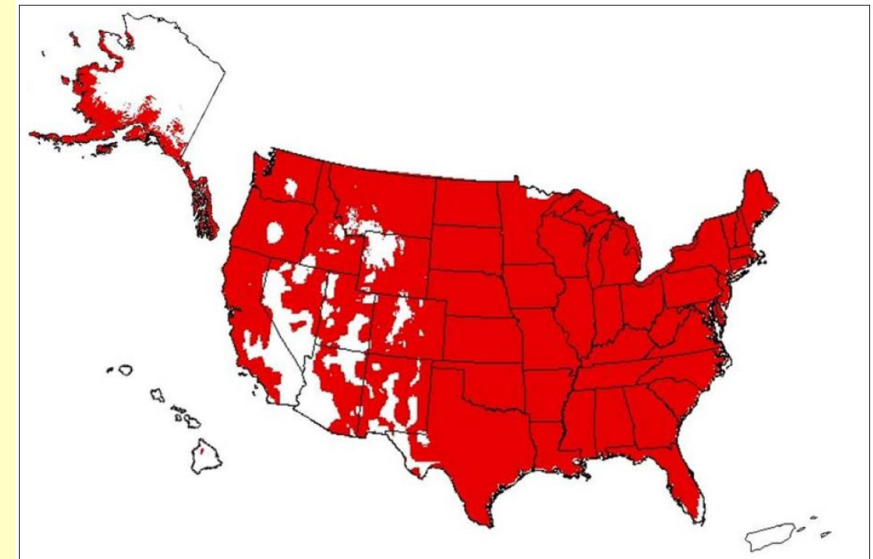
Plant Epidemiology and Risk Analysis Laboratory  
Center for Plant Health Science and Technology

Plant Protection and Quarantine  
Animal and Plant Health Inspection Service  
United States Department of Agriculture  
1730 Varsity Drive, Suite 300  
Raleigh, NC 27606

# Current distribution and potential for spread



- Counties colored aqua-blue represent known populations of *Ficaria verna*
- States colored gold have no reported infestations of *Ficaria verna*



**Figure 1.** Predicted distribution of *Ficaria verna* in the United States. Map insets for Alaska, Hawaii, and Puerto Rico are not to scale.

- Area colored red indicates potential distribution of *Ficaria verna*



Fig Buttercup Floodplain Infestation (March)

## Invasive Weed Alert!

Be on the lookout for the invasive plant **Fig Buttercup** growing in your yard, in drainage ditches, and along streams in natural areas.

Fig Buttercup (*Ficaria verna*) is an herbaceous invasive plant native to Europe, N. Africa & West Asia that is aggressively colonizing floodplain and streamside natural ecosystems within the Triangle and NC. The aggressive nature of this plant disrupts the ecological balance of natural ecosystems and displaces existing native spring wildflowers & native plant communities. In the home landscape, Fig Buttercup is a problematic spring weed that can take over home lawns and plant beds. Fig Buttercup easily spreads offsite from home landscapes and into drainage ways leading to nearby streams and floodplains.



Fig Buttercup Plant in Bloom



Fig Buttercup Flower



Fig Buttercup Leaf (reptile-like pattern)

### How You Can Help

**Look for It.** Keep a lookout for the green foliage of Fig Buttercup emerging from dormancy in January followed by yellow multi-petaled flowers blooming in late February through April.

**Report It.** If you find Fig Buttercup in your yard, along public greenways, or in other locations, please let us know. To report known locations and find more detailed information on Fig Buttercup, please visit our webpage at <http://nc-ipc.weebly.com/fig-buttercup-project>

**Get Involved.** Volunteer with local groups to help map and eradicate Fig Buttercup in your area. Visit our website for local contacts that are leading these efforts.



The NC Invasive Plant Council is working with local organizations and government agencies to identify, map, and remove populations of Fig Buttercup in the Triangle area. We need your help to stop the spread of this invasive plant!

For more info, visit <http://nc-ipc.weebly.com/fig-buttercup-project>

Sponsoring partners: City of Raleigh, Wake County, City of Durham, Durham County, Orange County, Triangle Land Conservancy, Duke Forest, Eno River Association, Ellerbe Creek Watershed Association, North Carolina Botanical Garden.

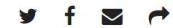


LIVING

## This pretty yellow flower doesn't belong in NC. And it's harming Triangle backyards.

BY CHARLIE INNIS

UPDATED APRIL 18, 2021 10:07 AM



Non-native plant species are spreading across the Southeast. While many of the plants can be bought in nurseries, some botanical experts say you should avoid growing them. Here are examples of flora considered a threat to natural ecosystems. BY KEVIN KEISTER



Only have a minute? Listen instead

Powered by Trinity Audio

00:00



09:32

It floats downstream. After a spell of rain, water carries it through tributaries, where it nestles in the soil along rivers and creeks. For months, it lies unnoticed, hidden in the dirt.

But it reveals its presence when spring arrives. This year, it is taking over a watershed spanning Durham and Chapel Hill, popping up in parks and backyards like a rash on the earth's surface.

# Triangle Gardener back cover

# News & Observer interview



Valerie Hammer, a gardener, wondered aloud whether the three plant experts would be successful.

“There are invasive plants, so they’re taken over, I understand that,” she said.

“But they have skills that make them extremely well-suited to survive,” she continued. “And that’s the way nature works. It’s survival of the fittest. So what chance do you really have to eradicate all of this?”



<https://nc-ipc.weebly.com/fig-buttercup-project>

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# Fig Buttercup Project

## What is Fig Buttercup, and why is it a problem?

Fig buttercup (*Ficaria verna*) is an invasive plant that is aggressively taking over floodplain and streamside ecosystems in North Carolina. It spreads easily when its bulblets and tubers spread through water to start new colonies. Once established, it creates dense mats that out-compete native plants and disrupts the natural balance of our ecosystems.

Also called lesser celandine and pilewort, fig buttercup is generally only visible above ground in winter and spring. It puts out leaves in winter, and then its yellow flowers appear in March and April. By early summer, the flowers and leaves die back, and the plant becomes dormant until the following winter.

Native to Europe, North Africa, and West Asia, fig buttercup has long been invasive in the northeastern U.S. In the last 10 to 15 years, it has increasingly become a problem here in North Carolina. Sometimes grown as an ornamental plant, it can spread from home gardens into drainage ways to nearby streams and floodplains



Fig buttercup blanketing a Triangle-area lawn. Photo by Charlie Innis for the News & Observer.

# Report a finding

## Make an observation on iNaturalist

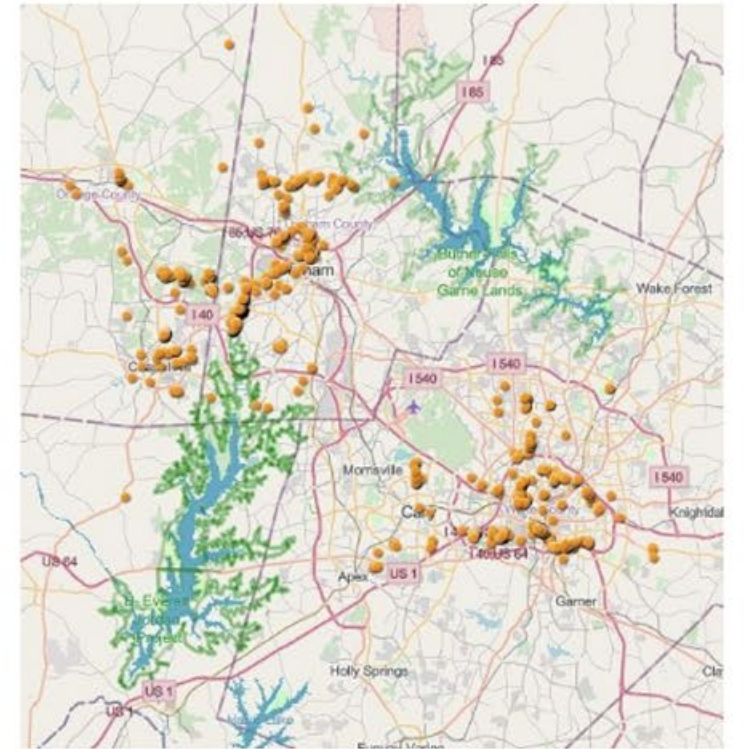
iNaturalist ([inaturalist.org](https://www.inaturalist.org)) is a joint venture between the California Academy of Sciences and the National Geographic Society that allows you to upload location-specific photos of plants, animals, and fungi to its free website or app.

If you upload your observation of fig buttercup to iNaturalist, it helps us track the plant's spread through the state. During fig buttercup's active seasons, we regularly update our GIS map of known sightings with the latest iNaturalist observations.

New to iNaturalist? [Watch a tutorial to get started.](#)

## Email us

If you're not comfortable with iNaturalist, send an email noting the location of the sighting (and preferably including photos) to [figbuttercupnc@gmail.com](mailto:figbuttercupnc@gmail.com).



Find sightings of fig buttercup near you: click on the map to open the interactive viewer! We regularly update this GIS map with iNaturalist observations made in Chatham, Orange, Durham, and Wake Counties during fig buttercup's active seasons.



# iNaturalist Fig Buttercup in the Triangle Region project and data import to Fig Buttercup Project database



**Fig Buttercup in the Triangle Region**

About Members 40

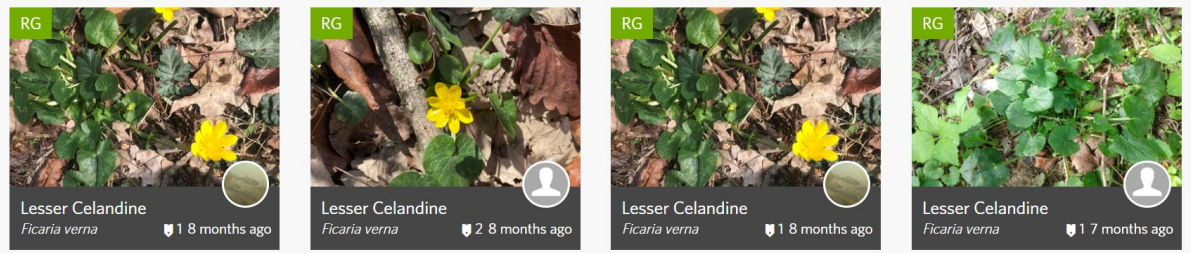
Fig Buttercup (*Ficaria verna*) also known as Lesser Celandine is an introduced, aggressive species that is rapidly colonizing the Triangle region, particularly along streams. We need your help to understand where it has spread so we can treat it effectively. And we have to move fast; the plants flower in March-April and are gone by May-June.

[Read More >](#)

[Project Journal](#)

Overview **2,354** OBSERVATIONS **1** SPECIES **121** IDENTIFIERS **323** OBSERVERS [Stats](#)

Recent Observations [View All](#)



Lesser Celandine *Ficaria verna* 1 8 months ago

Lesser Celandine *Ficaria verna* 2 8 months ago

Lesser Celandine *Ficaria verna* 1 8 months ago

Lesser Celandine *Ficaria verna* 1 7 months ago

Most Observations		Most Species		Most Observed Species	
jtuttle	1,064	nrambojr	1	Lesser Celandine	2,354
julianwilson	125	peakinn	1	<a href="#">View All</a>	
annprince52	92	chewst	1		
cynthiekulstad	84	benran100	1		
whiteoak	68	lorlin	1		
bragassa	64	emdt	1		

[Back to Fig Buttercup in the Triangle Region](#)

## Fig Buttercup in the Triangle Region

Fig Buttercup (*Ficaria verna*) also known as Lesser Celandine is an introduced, aggressive species that is rapidly colonizing the Triangle region, particularly along streams. We need your help to understand where it has spread so we can treat it effectively. And we have to move fast; the plants flower in March-April and are gone by May-June. Learn more about this plant from the NC Invasive Plant Council: <http://nc-ipc.weebly.com/ficaria-verna--fig-buttercup.html>, including a link to a fact sheet by the Plant Conservation Alliance.

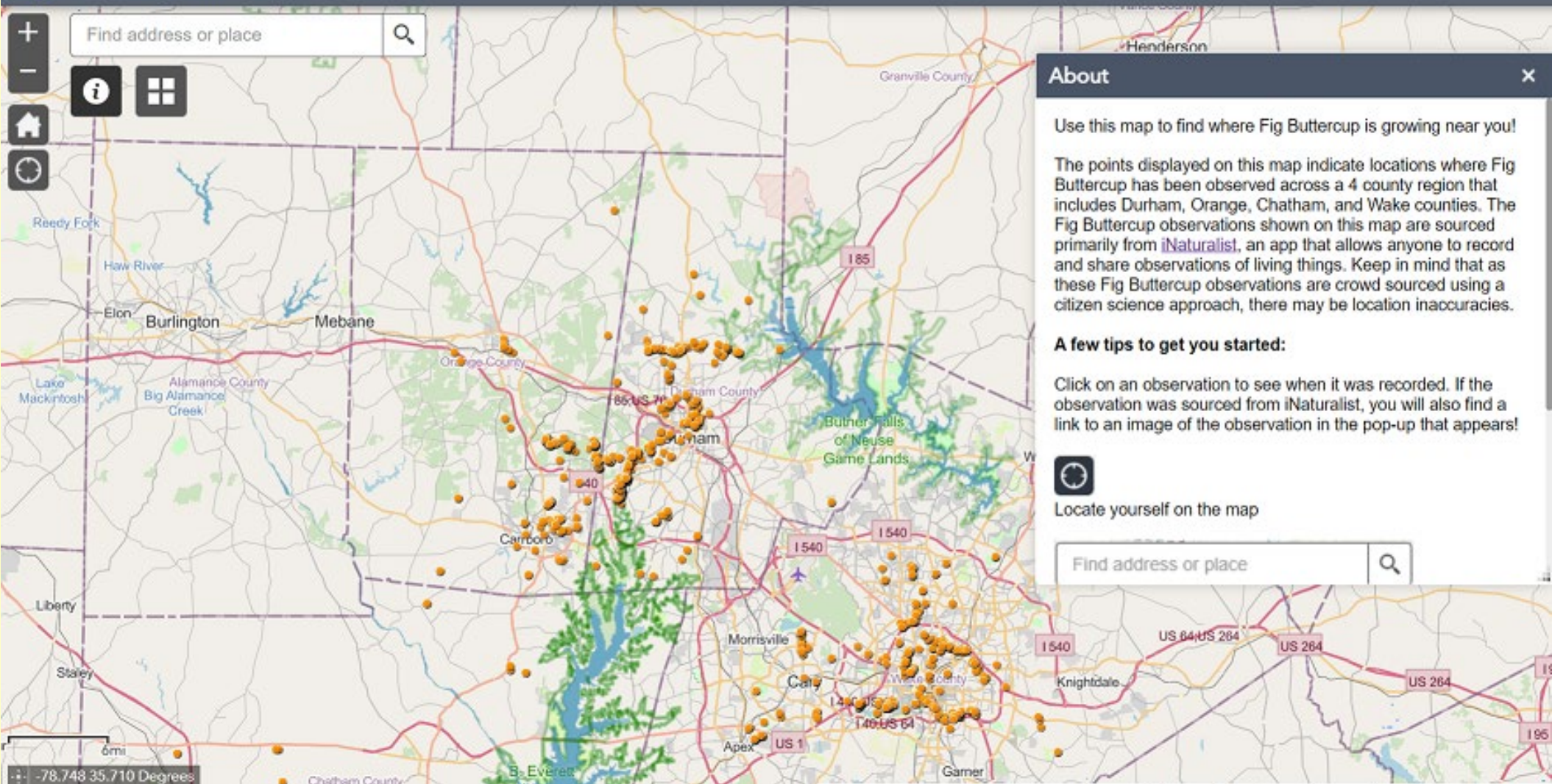
Created by: emmakilbourn - March 12, 2021

Project admins: jtuttle, emmakilbourn



## Find Fig Buttercup Near You!

Find address or place



### About



Use this map to find where Fig Buttercup is growing near you!

The points displayed on this map indicate locations where Fig Buttercup has been observed across a 4 county region that includes Durham, Orange, Chatham, and Wake counties. The Fig Buttercup observations shown on this map are sourced primarily from [iNaturalist](#), an app that allows anyone to record and share observations of living things. Keep in mind that as these Fig Buttercup observations are crowd sourced using a citizen science approach, there may be location inaccuracies.

#### A few tips to get you started:

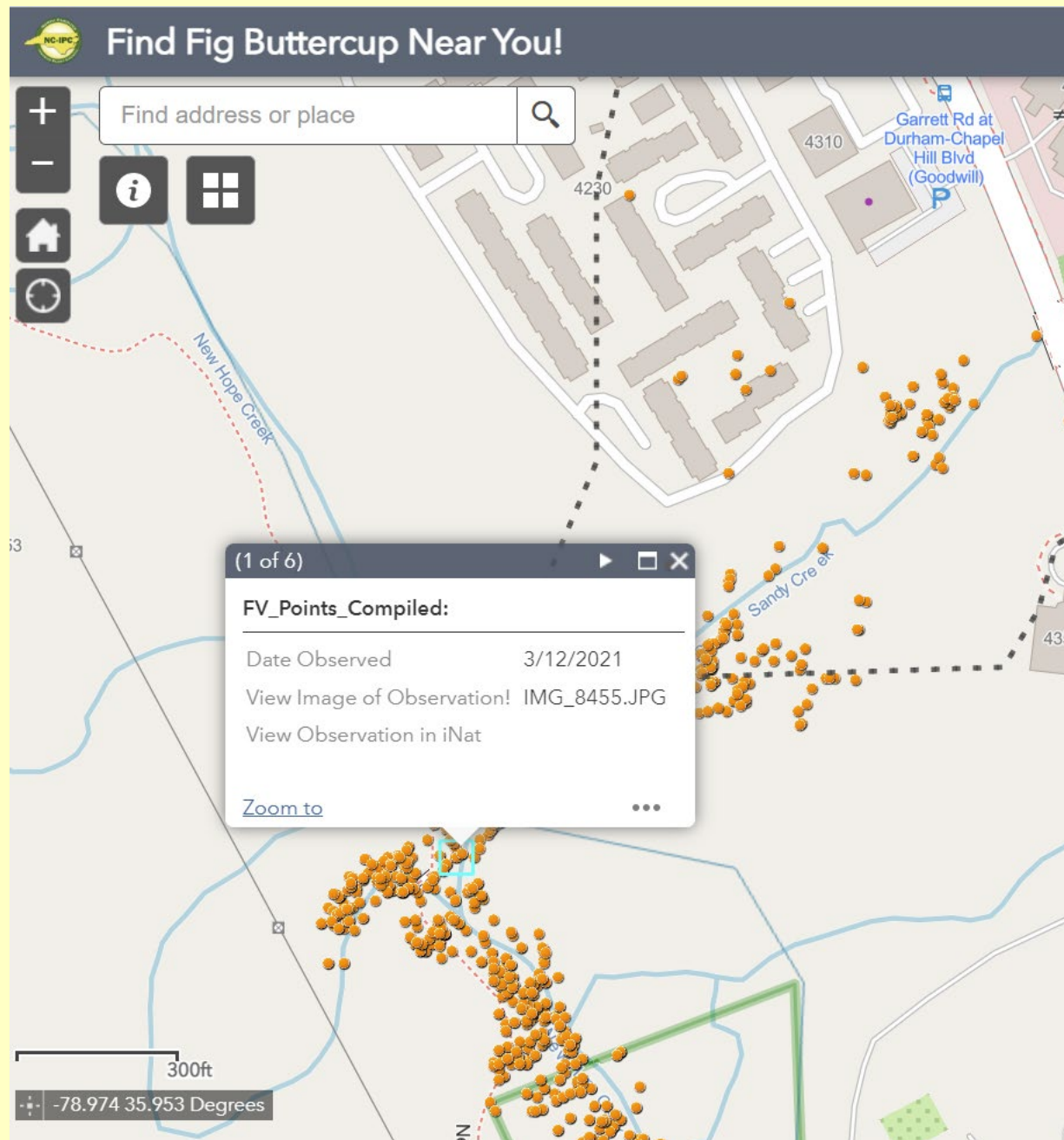
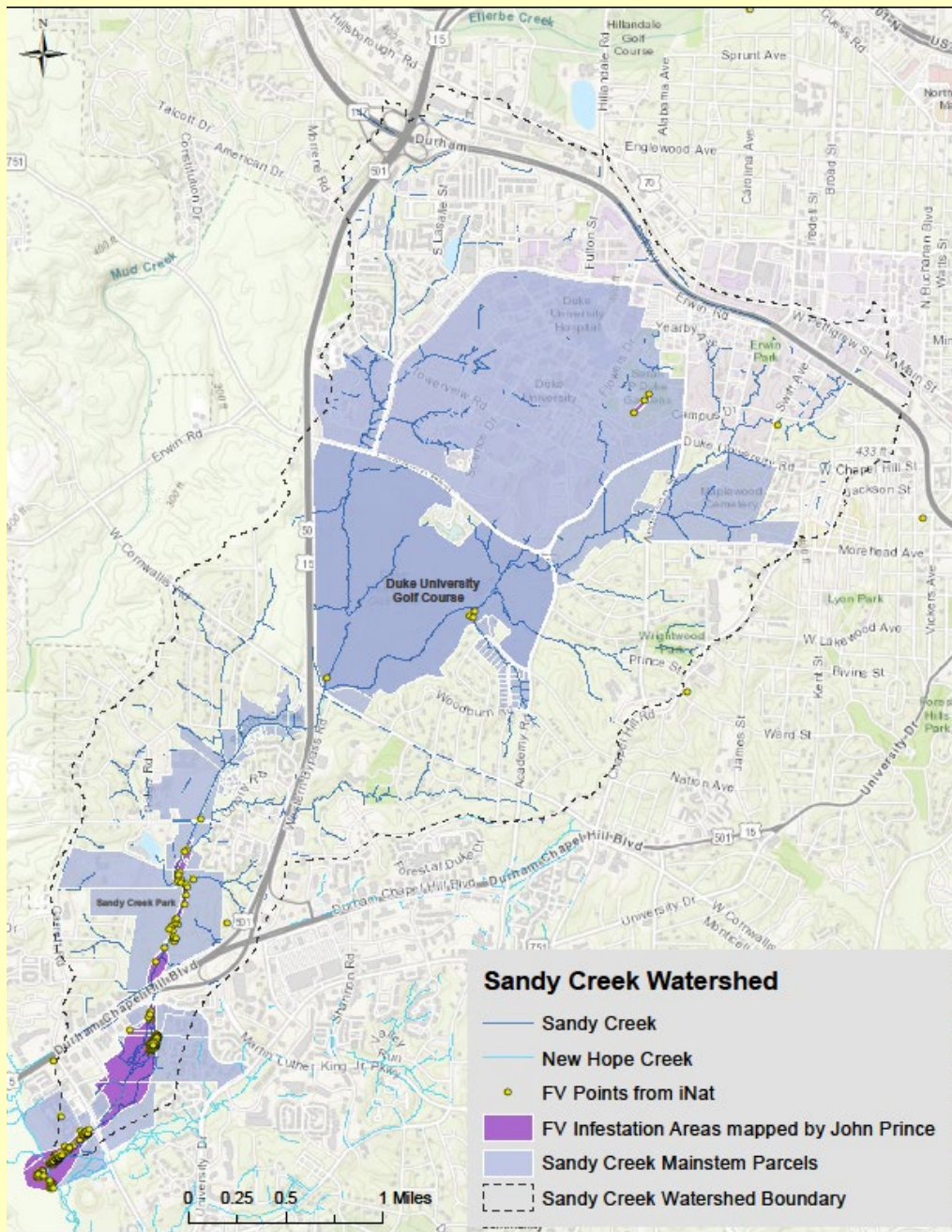
Click on an observation to see when it was recorded. If the observation was sourced from iNaturalist, you will also find a link to an image of the observation in the pop-up that appears!



Locate yourself on the map

Find address or place





P34

1000 WINDERMERE DR

	A	H	O	P	Q	R	W	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL
1	FID	Fv	Mag	OWNER	ADDR	CITY	ST	PrclFvSite	phone								
2	0	58		CITY OF DURHAM ATTN GEN SERVICES REAL EST	3510 SANDY CREEK DR	DURHAM	NC	parcel involved in 3 sites	919								
3	0	58		COLES INC	3107 PICKETT RD	DURHAM	NC	parcel contains 1 Fv site	919								
4	1	57		CITY OF DURHAM ATTN GEN SERVICES REAL EST SOUTH SQUARE OWNER	3510 SANDY CREEK DR	DURHAM	NC	parcel involved in 3 sites	919								
5	1	57		LLC (multi family home) SOF-X MISSION	4240 LARCHMONT RD	DURHAM	NC	parcel contains 1 Fv site	919								
6	1	57		UNIVERSITY PINES LP	614 SNOWCREST TRL	DURHAM	NC	parcel contains 1 Fv site	8662970717								
7	1	57		GOODWILL COMMUNITY FOUNDATION INC	4318 GARRETT RD	DURHAM	NC	parcel contains 1 Fv site	9194931182								
8	1	57		AREC 14 LLC (Uhaul)	4411 DURHAM CHAPEL HILL BLV	DURHAM	NC	parcel contains 1 Fv site	9196829302								
9	1	57		SOUTH SQUARE OWNER LLC (Alen Place Luxury	100 ALEXAN DR	DURHAM	NC	parcel contains 1 Fv site	9842445259								
10	1	57		ACY XIII LLC (at the Garrett Apartments)	4230 GARRETT RD	DURHAM	NC	parcel involved in 2 sites	9194892302								
11	1	57		TUESDAY TWOSOMES LLC (Sweet Paws)	4350 GARRETT RD	DURHAM	NC	parcel contains 1 Fv site	9192467530								
12	1	57		BOULEVARD FOREST & TREES LLC (forest land?) FISHER JEFFREY A (landlord?)	3601 SOUTHWEST DURHAM DR	DURHAM	NC	parcel contains 1 Fv site	919								
13	2	52		THURAU MATTHIAS O (landlord?)	678 ERWIN RD	DURHAM	NC	parcel contains 1 Fv site	mobile 9196320161 land 9194036343								
14	2	52		ORANGE COUNTY NORTH CAROLINA	667 ERWIN RD	DURHAM	NC	parcel involved in 4 sites	mobile1 4315484181 mobile2 5037354898								
15	2	52		DUKE UNIVERSITY DEPARTMENT OF TRANSPORTATION	686 ERWIN RD	DURHAM	NC	parcel contains 1 Fv site	919								
16	2	52		FISHER JEFFREY A (see above entry)	678 ERWIN RD	DURHAM	NC	parcel contains 1 Fv site	919								
17	2	52		CITY OF DURHAM ATTN GEN SERVICES REAL EST NC DEPT OF TRANSPORTATION	106 W KNOX ST	DURHAM	NC	parcel contains 1 Fv site	919								
18	2	52		MOSIER TODD S MOSIER ERIN K	212 DACIAN AVE	DURHAM	NC	parcel contains 1 Fv site	mobile1 8167180702 mobile2 8168853744 mobile3 5126333823 land1 5124777990 land2 2194366895								
19	3	44		MOSIER TODD S MOSIER ERIN K (see above entry)	214 DACIAN AVE	DURHAM	NC	parcel contains 1 Fv site	919								
20	4	47		NISONGER MATTHEW A	5611 MT SINAI RD	DURHAM	NC	parcel contains 1 Fv site	mobile1 3238296535 mobile2 6192745087 land 9194016810								
21	5	42		STEKETEE MAREAH	5609 MT SINAI RD	DURHAM	NC	parcel contains 1 Fv site	9194931459								
22	5	42		NORTON JANE M	5605 MT SINAI RD	DURHAM	NC	parcel contains 1 Fv site	9194901849								
23	6	55		CITY OF DURHAM ATTN GEN SERVICES REAL EST DURHAM PUBLIC SCHOOLS BOARD OF AMERICA	4702 OLD CHAPEL HILL RD	DURHAM	NC	parcel contains 1 Fv site	919								
24	6	55		UNITED STATES OF AMERICA	4800 OLD CHAPEL HILL RD	DURHAM	NC	parcel contains 1 Fv site	919								
25	7	46		DUKE UNIVERSITY WILLIAMS AMY	4452 OLD CHAPEL HILL RD	DURHAM	NC	parcel contains 1 Fv site	919								
26	7	46		HART RICHARD E HICKS SALLY O	2402 ACADEMY RD	DURHAM	NC	parcel involved in 2 sites	919								
27	8	53		HOLMES THOMAS P	1405 N MANGUM ST	DURHAM	NC	parcel contains 1 Fv site	mobile 9199327383 land1 9196671405 land2 8139327383								
28	8	53		HOLMES NANCY C NYE	1408 N MANGUM ST	DURHAM	NC	parcel contains 1 Fv site	land1 9196823426 land2 9195423318								
29	9	41		SOLIE GUY THOMSON	2402 ACADEMY RD	DURHAM	NC	parcel involved in 2 sites	919								
30	11	54		TRUSTEE (Leah Mahoney)	101 E MARKHAM AVE	DURHAM	NC	parcel contains 1 Fv site	mobile 9198018203 land 9193838957								

Fv\_parcelswithINatPoints\_4phone

Locating and contacting 151 neighbors in the Sandy Creek watershed area by e-mail, phone, and US Mail to request access to properties for purpose of monitoring and (hopefully) treatment.



## Local Contacts

# Who you gonna' call?

Looking to connect with people and organizations working to stop the spread of fig buttercup in your area? This list of individuals and organizations is a work in progress; check back if you don't see your area represented.

### Raleigh

#### City of Raleigh

Leigh Bragassa

Invasive Program Coordinator

*Raleigh Parks, Recreation and Cultural Resources*

[leigh.bragassa@raleighnc.gov](mailto:leigh.bragassa@raleighnc.gov)

919-278-6244

Owen Cass

*Raleigh Parks, Recreation and Cultural Resources*

[owen.cass@raleighnc.gov](mailto:owen.cass@raleighnc.gov)

### Durham

#### Durham County Open Space Division

Celeste Burns

Open Space & Real Estate Coordinator

[cburns@dconnc.gov](mailto:cburns@dconnc.gov)

Phone: (919) 560-7956

#### Eno River Watershed (Durham/Orange Counties)

Kim Livingston

Director of Conservation and Stewardship

Eno River Association

[stewardship@enoriver.org](mailto:stewardship@enoriver.org)

#### Ellerbe Creek Watershed

Donna Myers

Stewardship Director, ECWA

[donna@ellerbecreek.org](mailto:donna@ellerbecreek.org)

Rickie White

Executive Director, ECWA

[rickie@ellerbecreek.org](mailto:rickie@ellerbecreek.org)

#### Duke Forest

Tom Craven

Forest Supervisor, Duke Forest

Duke University

Phone: 919-489-7211

[tmc8@duke.edu](mailto:tmc8@duke.edu)

### Chapel Hill

Johnny Randall

Director of Conservation Programs, North Carolina Botanical Garden

[jrandall@email.unc.edu](mailto:jrandall@email.unc.edu)

919-962-2380

### Orange County

#### Orange County Parklands

Christian Hirni

Land Conservation Manager

Natural & Cultural Resources Division

[chirni@orangecountync.gov](mailto:chirni@orangecountync.gov)

919-245-2514

#### Eno River Watershed (Durham/Orange Counties)

Kim Livingston

Director of Conservation and Stewardship

Eno River Association

[stewardship@enoriver.org](mailto:stewardship@enoriver.org)

# Native Lookalikes

These are a few common North Carolina native plants that are also low-growing, woodland wildflowers with yellow blooms. Notice that none of them has as many petals (eight) as fig buttercup, and in most cases, the leaves are a different shape, too.



**Green-and-gold** (*Chrysogonum virginianum*)

- Flowers have just five petals
- Flower stalk is covered with fine hairs

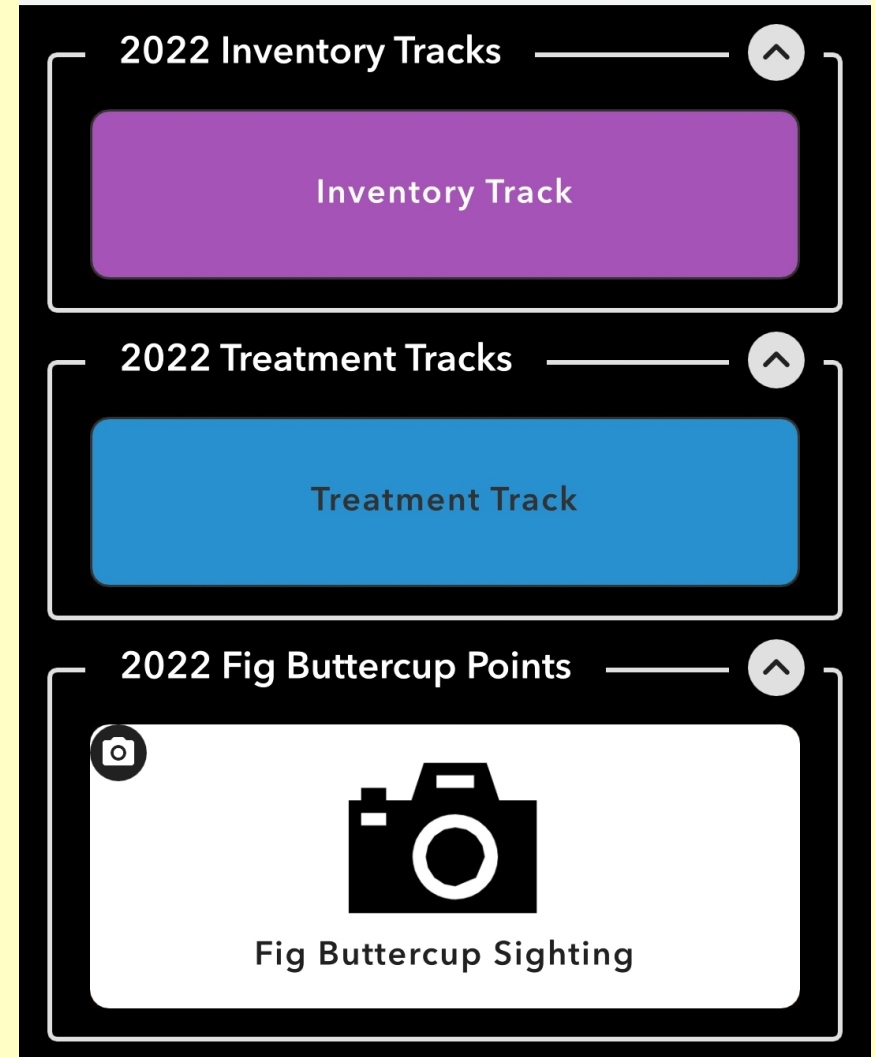


**Wood sorrels** (*Oxalis stricta*, *Oxalis dillenii*, *Oxalis grandis*, and more)


- Flowers have just five petals
- Leaves are divided into three like a shamrock




# Training on Inventory Tracks app for inventory and treatment








# My realm...

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
## Lesser Celandine (*Ficaria verna*) Research Grade Follow

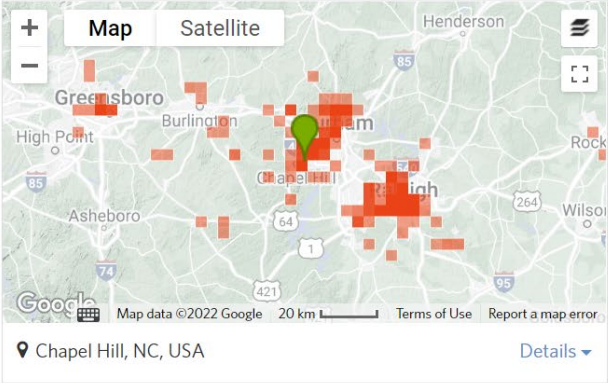


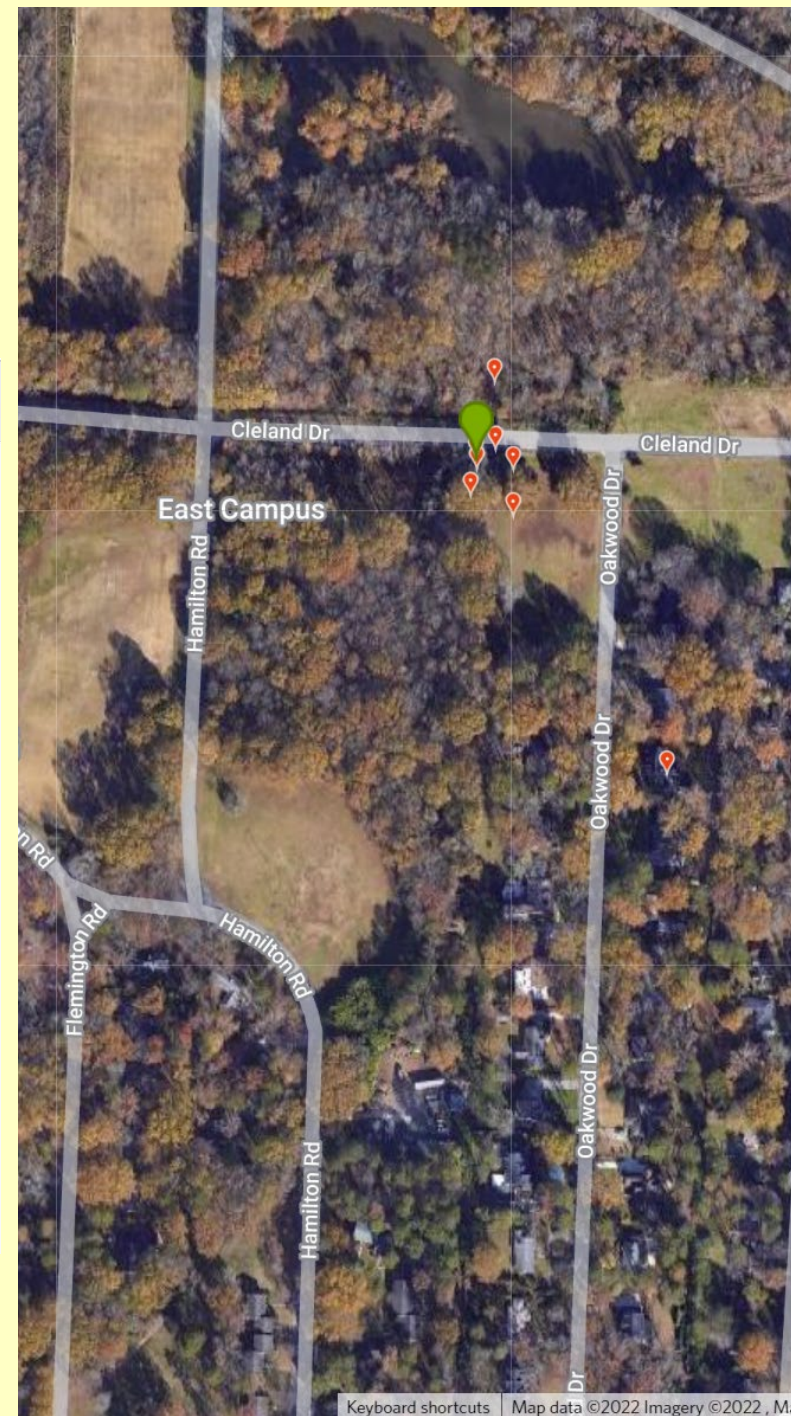
 **jrandall**  
 13 observations ← →

Observed: Mar 30, 2021 · 4:15 PM EDT      Submitted: Mar 31, 2021 · 3:26 PM EDT

 **Map** 



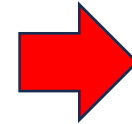
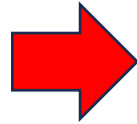
Chapel Hill, NC, USA Details





Using herbicide to remove *Ficaria verna*. Find this resource on the [Fig Buttercup Project](#) webpage at NC-IPC.org

[NC-IPC Homeowner's Guide to Controlling Fig Buttercup](#)





*Ficaria verna*  
(fig buttercup)  
smother  
treatment  
experiment

