



THE UNIVERSITY
of NORTH CAROLINA
at CHAPEL HILL

THE DEPARTMENT OF BIOLOGY
THE CAROLINA VEGETATION SURVEY

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TO: PULSE-2011B Participants

FROM: The Carolina Vegetation Survey

SUBJECT: AN INVITATION!

The Carolina Vegetation Survey cordially invites you to attend PULSE-2011B, the 24th Annual Carolina Vegetation Survey Field Foray. To our many friends from past pulse events, we extend our thanks for your support and invite you to work with us again. To those who have not attended a Pulse, we hope you'll consider joining us for the first time this year. In either case, please read on...

PULSE 2011B: June 4-11

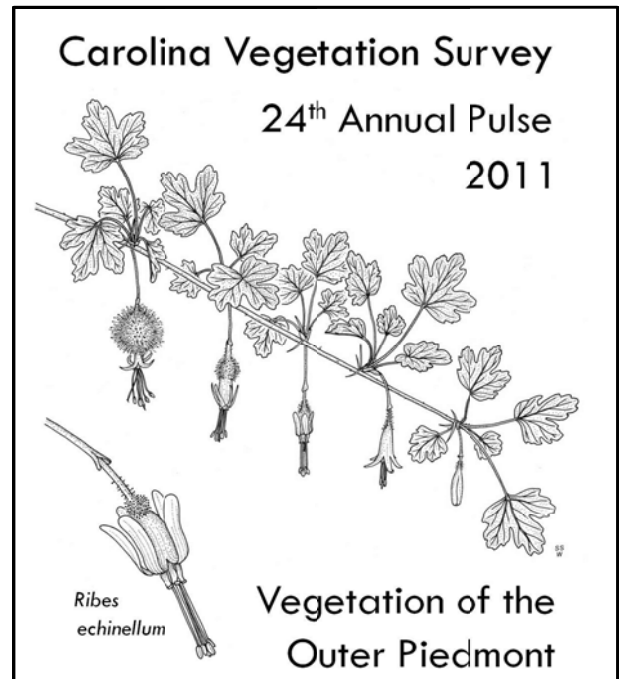
The second Pulse event of 2011, PULSE2011B, will be held **June 4-June 11 throughout the North Carolina Triangle**. We will focus our efforts during the first two days of the event in the vicinity of southern Wake and Harnett Counties; we have arranged lodging (June 3PM -June 5AM) at Campbell University, in Buies Creek, NC. During the final six days of the event, we will focus our efforts in northern Wake, southern Granville, Orange, Durham, Chatham, and Alamance Counties; we have arranged lodging at New Hope Camp and Conference Center, in Chapel Hill, NC (June 5PM - June 11AM). Details explained below.

Please note: This is the **FINAL** Pulse event of 2011.

But first, to whet your appetite ...

WHAT WE DID AT PULSE 2011A!

Earlier this month, the Carolina Vegetation Survey hosted its first Pulse of 2011 along the outer Piedmont and Fall Line zone of far western South Carolina (within the Savannah River drainage). A total of 60 plots were established during the week-long field foray. We sampled a wide variety of community types from southern Abbeville to Barnwell Counties, including dry-mesic oak - hickory forests, basic mesic forests, xeric pine glades, riparian bottomlands and terraces, open scrub-shrub zones on udorthent soils, Piedmont Monadnock forests, longleaf woodlands over sandstone, and Atlantic white cedar forests. The overall diversity of communities we sampled during the first Pulse of 2011 is quite high. Even more interesting is that many of



these sites correspond poorly with the current recognized National Vegetation Classification associations. (Imagine a plot with a canopy of *Pinus virginiana* & *P. palustris*, a subcanopy of *Vaccinium arboretum* & *Kalmia latifolia*, and a sparse ground layer dominated by *Juniperus communis*; or imagine a half-size plot with over 130 species and with 33 in the stem count including two *Magnolia* species and only a single stem of *Quercus*). The vegetation data collected during this sampling event will certainly be used to refine our understanding of the communities within the southwestern Piedmont of South Carolina. We anticipate completing a first cut at plot classification to community type prior to Pulse 2011B. As always, this information will be available on the Pulse website (<http://cvs.bio.unc.edu/pulses.htm>).

Finally, a quick word on the *Acer* / *Quercus* conundrum we encountered in this part of the world: throughout the week we sampled plots with bizarre looking maples and oaks. These plants just didn't quite fit the bill, so to speak, with their characteristics not matching up with those of the species we were expecting for the region. In terms of *Acers*, we sampled mesic mixed hardwoods, oak - hickory, and basic mesic forests that contained *Acer floridanum* and *leucoderme*. But there was an odd-ball in amongst the southern sugars that appears more closely aligned with *Acer nigrum*, previously undocumented for the Palmetto State! We also kept running into white oaks that seem to align more closely with bluff oak, *Quercus austrina*, than *Quercus alba*. We sampled a terrace of the Savannah River (Barnwell County) last Friday that appears to have at least 9 species of oaks (*alba*, *austrina*, *laurifolia*, *michauxii*, *nigra*, *pagoda*, *phellos*, *similis/stellata*, and *sinuata*)! Needless to say, the specimens that we brought back from these two groups will undergo scrutiny in the upcoming weeks.

WHAT IS PULSE?

For those of you not familiar with the Pulse events, each year the Carolina Vegetation Survey organizes one or more group efforts to study intensively the vegetation of some natural region within North and/or South Carolina. All persons interested in vegetation and/or field botany are invited to participate for as many days as is convenient. Any level of experience is appropriate; the only requirement is that you bring your enthusiasm for field work. The annual "Pulses" of the CVS have become established as special events for those interested in the natural history of the Carolinas. We sample a wide variety of natural communities in areas well known for their biological diversity. Many of these areas are not readily accessible without special arrangements with landowners/managers. This is an ideal way to see new and exciting areas, meet others interested in botany and ecology, and to share knowledge and experience. (Descriptions of past Pulses have ranged from "Boot Camp for Botanists" to "Woodstock for Botanists" to "Extreme Botany".)

References:

- 1) <http://cvs.bio.unc.edu/press.htm> (press coverage)
- 2) <http://cvs.bio.unc.edu/pulse/PulsePix.pdf> (photos)
- 3) <http://cvs.bio.unc.edu/PULSE2006-9.ppt> (slide show)
- 4) <http://cvs.bio.unc.edu/pulses.htm> (general info.)

PULSE 2011B

Pulse 2011B has a two-fold mission. The first mission is to focus our efforts on sampling within broad-ranging community types (dry-mesic oak-hickory forests, acidic and basic mesic forests) that have poor representation in our overall dataset from this region of North Carolina. The second mission is to focus on unique areas that may only be found in the regions we're working in. Our sampling region on the first day of the event (Saturday, June 4) will include sites in Harnett and Johnston Counties. On June 5 (Sunday), our travel day, we will sample sites in southern Wake County, in route to our lodging site between Chapel Hill and Hillsborough, NC. During the remainder of the event (June 6-11), we will sample throughout Orange, Durham, Wake, southern Granville, and Chatham Counties.

We have rented facilities at Campbell University (Buies Creek, NC) for the first two nights of the event (<http://www.campbell.edu/>). **The dates we will be working out of Buies Creek are Friday PM, June 3 through Sunday AM, June 5. Our first work day will be Saturday, June 4!!**

For the remainder of the event, we have rented facilities at the New Hope Camp & Conference Center, between Chapel Hill and Hillsborough (<http://www.newhopeccc.org/>). **The dates we will be working out of the camp are Sunday PM, June 5 through Saturday AM, June 11. Our first work day from New Hope Camp will be Monday, June 6!!**

We anticipate visiting a broad range of vegetation types. You can expect the full range of acidic to basic and xeric to mesic oak-hickory forests, mixed mesic hardwood forests, xeric hardpan forests, Piedmont longleaf woodlands, Piedmont Monadnock forests, Piedmont heath bluffs, acidic glades and cliffs, and beaver-influenced riparian zones. **If you have nominations of particular places we should visit, please send them our way.**

SCHEDULE

Pulse Day / Lodging Summary:

	Fri - June 3	Sat - June 4	Sun - June 5	Mon - June 6	Tue - June 7	Wed - June 8	Thu - June 9	Fri - June 10	Sat - June 11
Lodging PM	Campbell U.	Campbell U.	New Hope Camp	New Hope Camp	New Hope Camp	New Hope Camp	New Hope Camp	New Hope Camp	No lodging
Pulse Day		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8

Our Pulse base camp for the first two days will be the **Powell Hall** on the campus of **Campbell University** in Buies Creek, NC. We have reserved rooms from the night of Friday, June 3 through the morning of Sunday, June 5. During the remainder of the event, we will be relocating to the **Dogwood Lodge** on the grounds of the New Hope Camp & Conference Center in Chapel Hill, NC. We have reserved rooms here from the night of Sunday, June 5 through the morning of Saturday, June 11. There is no charge to you for use of these accommodations. Those wishing to participate in this Pulse may begin working with us on any day and stay as long as desired (any length of time from one day to the full eight days). **Our first day in the field will be Saturday, June 4.** The best plan would be to arrive the night before the first day you plan to work. For those of you interested

in joining us for the first day of field work, our first night at Campbell University will be Friday, June 3. If you prefer to join us in the morning, please be ready to leave for the field from the base camp no later than 7:30 AM on the morning you wish to start. Our last scheduled day in the field will be Saturday, June 11, but we do not have overnight facilities rented for that night.

REGISTRATION

Although our accommodations allow us some flexibility in the number of people staying with us, we would appreciate you contacting Forbes Boyle (mboyle@unc.edu, 919-265-7505), Bob Peet (peet@unc.edu, 919-962-6942) or Tom Wentworth (tom_wentworth@ncsu.edu, 919-515-2168) in advance of the Pulse to let us know of your plans. Notifying us of your plans will also help us with advance planning for teams. **Please inform us not only the days you wish to Pulse, but also the nights which you need lodging!**

THE DETAILS: LODGING, MEALS, AND OTHER CONSIDERATIONS

Individuals are responsible for their own meals. We will have access to full kitchen facilities at New Hope Camp. You must provide your own dishes and silverware. We will have access to a refrigerator and microwave, but no stove/oven, at Campbell University.

We'll eat breakfast at the dorms/camp, and leave promptly for the field each morning. We'll take our field lunches with us (bring plenty to drink), and then typically eat out for dinner, although those wishing to prepare their own dinner meals at either site are welcome to do so.

You must come prepared to make up your own bed. A light sleeping bag would be a simple solution, or you can bring your own linens. Don't forget towels, pillow, pillowcase, toiletries, etc. Tent camping is welcome at the New Hope Camp, but not at Campbell University.

We will adhere to standard rules of conduct and state park rules (e.g., illegal conduct, illegal substances, weapons of any kind, and public nudity are not permitted). No smoking in any building (smokers are responsible for ashes and butts outdoors). Candles or other open flames are prohibited in any building. On the other hand, it is perfectly acceptable, and even encouraged, to stay up to late hours collaboratively identifying plant fragments brought back from the field.

DIRECTIONS TO CAMPBELL UNIVERSITY (<http://tinyurl.com/6jad8gu>)

Campbell University (<http://www.campbell.edu/>)

110 Main St., Buies Creek, NC 27506

From the South

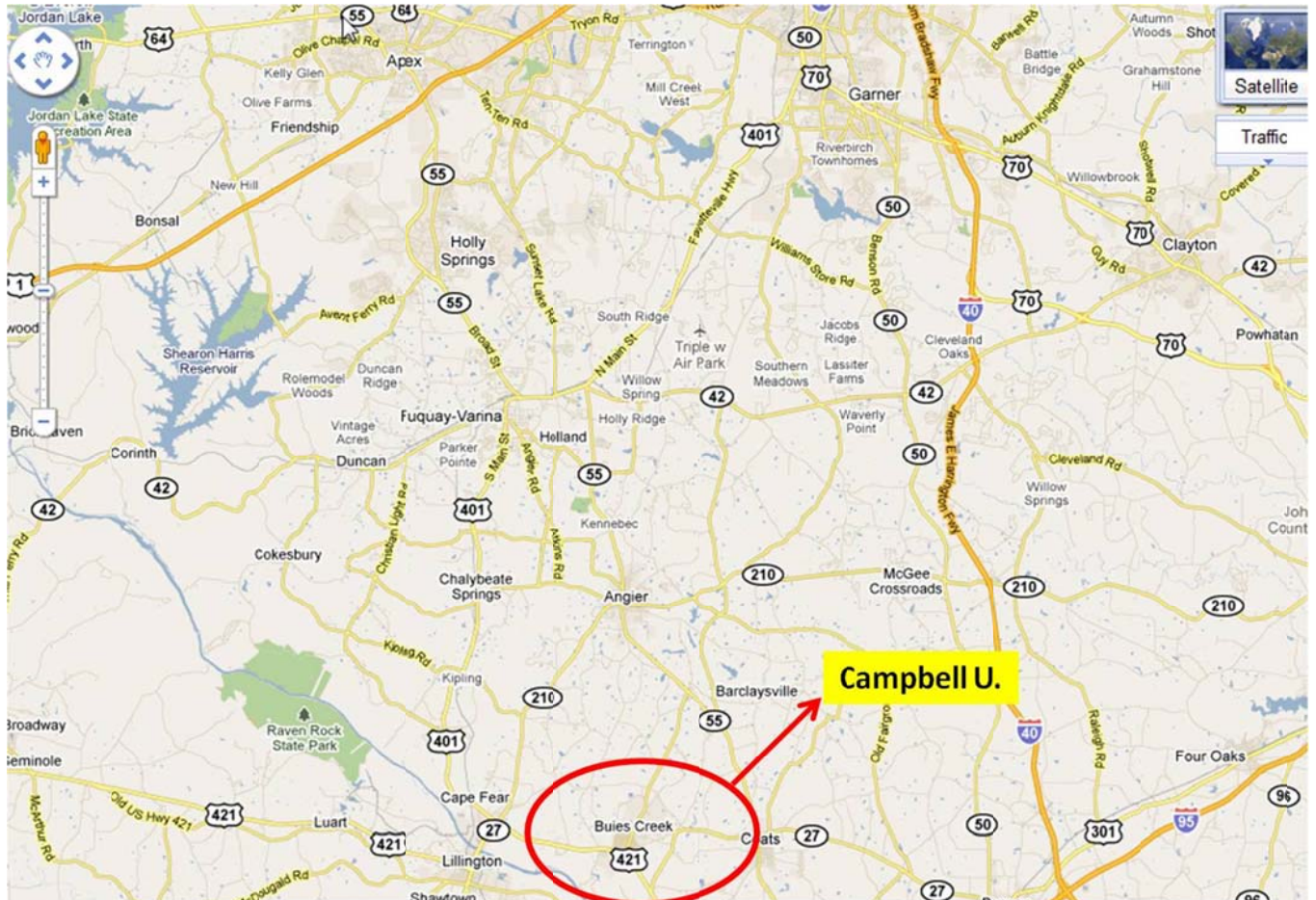
Take exit 73 off of I-95, head west through Dunn, follow U.S. 421 west to Campbell University. Entrance is on Highway 421 approximately 15 minutes from Dunn (signs are posted).

From the North

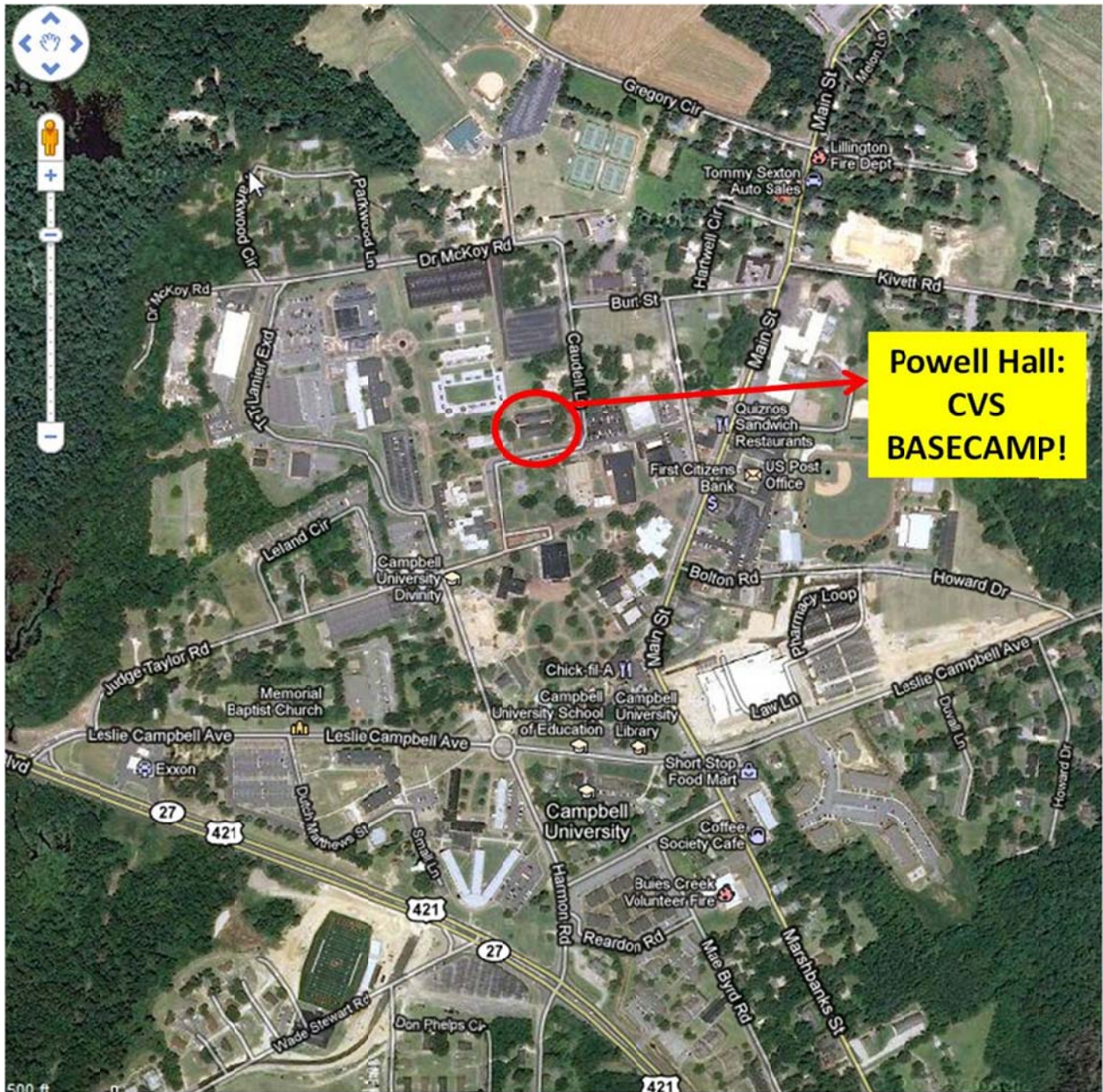
Take exit 79 off of I-95, head west through Benson, follow NC Route 27 west to Campbell University (signs are posted).

From the West

Choice of U.S. 421 or NC Route 27 through Lillington. Both routes take you to Campbell University (signs are posted).



Google image of Buies Creek, NC; location of Campbell University.



Google image of Campbell University; Powell Hall circled in red.

DIRECTIONS TO NEW HOPE CAMP & CONFERENCE CENTER

New Hope Camp & Conference Center (<http://www.newhopeccc.org/>)

(Address: 4805 N Carolina 86, Chapel Hill, NC 27514; Office Phone: 919-942-3266)

From points East and West on Interstate 40:

Take I-40 to exit 263.

Turn North onto New Hope Church Rd.

Take a right at the light onto Hwy 86.

Camp Circle will be your first right.

From Durham and points North:

Take I-85 to exit 165.

Turn South off of the exit and continue south on Hwy 86.

Cross New Hope Church Rd.

Camp Circle will be your first right.

From downtown Chapel Hill and points South:

Take Historic Airport Road/Martin Luther King Jr. Blvd., north toward Hillsborough.

Cross over I-40 (Historic Airport Rd./MLK Blvd. becomes Hwy 86).

Go three miles on Hwy 86.

Camp Circle will be on your left.

NHCCC is located at the end of Camp Circle:

Turn onto Camp Circle at the signs for NHCCC and New Hope Presbyterian Church.

Follow Camp Circle past the cemetery, church, and manse (white house) to the camp entrance.





Google image of New Hope Camp & Conference Center; Dogwood Lodge circled in red.

CVS CONTACTS

Website: <http://cvs.bio.unc.edu/>

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SAFETY AND PARTICIPATION GUIDELINES

The Pulse events have an excellent safety record, and we ask your assistance in our efforts to make PULSE2010 safe for all participants. If you are unfamiliar with hazards associated with field work, please consult with one of the coordinators. As you plan for PULSE2010, please keep in mind the conditions we will experience. The weather this time of year in the Carolinas is generally quite warm, and rainfall may be plentiful. Please equip yourself accordingly. A daypack with the basics for fieldwork is a necessity. Keep in mind that we typically eat lunch in the field, so plan to bring lots to drink and a bag lunch. Ticks and chiggers are generally a problem during the warmer months in the Carolinas. We recommend that you come equipped with a roll of duct tape for sealing pants legs to boots, if needed. Also bring whatever insect repellent/killer you prefer to use (100% DEET products are good repellents).

Pulse includes intensive field work in small groups of 3-5 persons. It is important that all participants share the spirit of collegial inquiry and discovery, that individuals respect the rights and feelings of others, and that all data be recorded as accurately and completely as possible. Participants who are concerned about activities or performance of other participants should immediately report such concerns to one of the organizers. The organizers reserve the right to limit the level of participation of any individual so as to assure the overall well being of the other participants and the quality of the data acquired. Participants should understand that participation in the Pulse events is voluntary and may involve risks including but not limited to motor vehicle accidents and other potential personal injuries and property damage. Participants must assume responsibility for all risks. Further, participants must indemnify and hold harmless the coordinators of the pulse events and their employers from any liability arising from or proximately caused by participation. You will be asked to sign a liability waiver before participating in PULSE2010.