## The Journal of the

## South Carolina Native Plant Society



#### Winter 2012

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#### Name That Plant!

Ok, so I'm not very pretty, but really, you've caught me at a bad time. I am a warm season native grass, so summer is my time to shine. You can find me growing along road margins and blooming in June through August. I am fashionably tall (up to six feet), and my flowers are among the more interesting in the grasses (actually I have two different types of flowers). My seeds are large and they mature from the terminal end of my racemes. As soon as a seed reaches maturity, I send it on its way, so if you plan to gather my seeds, you have to be very attentive to me, like dropping by every couple of days to visit. I am a sturdy, long-lived perennial, and I stand my ground very, very well!



The answer is embedded in the text somewhere in this newsletter. Photo by Bill Stringer.

# Sweetgrass: protecting ecology, culture, and livelihoods

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In and around the town of Mount Pleasant, SC, African American women and men make baskets using techniques developed by their West African ancestors, who adapted those methods to New World plants on lowcountry rice plantations (Rosengarten et al. 2008). The plant materials used to make these baskets



Figure 1. From top to bottom: bulrush needles, strips of palmetto leaves, long-leaf pine needles, and blades of sweetgrass. Photo by author.

have changed over time, but today they are typically made from four native plant materials: blades of sweetgrass (*Muhlenbergia filipes* or M. sericea), Sabal palmetto leaves, long-leaf pine needles (*Pinus palustris*), and bulrush stems (*Juncus roemerianus*) [see Figs. 1 & 2]. The persistence of this craft is directly connected to the survival of these native plants, and while development represents a threat to both, emerging relationships between basket makers, landowners, land managers, and scientists demonstrate the power of connecting cultural and ecological conservation projects. In this essay I describe the problems basket makers face and offer examples of ongoing and potential collaborative efforts that will resonate with native plant enthusiasts. These findings are based on interviews with basket makers, land managers, and discussions with my masters thesis committee at the College of Charleston: Drs. Patrick Hurley, Angela Halfacre, Dale Rosengarten, and John Rashford.

Between 1973 and 1994 the Charleston metro area increased by 250% and between 1996 and 2006 the number of building permits tripled each year (Beach 2002). Despite these dramatic landscape changes, basket makers

(See **Sweetgrass**, page 4)

#### Notes from the President:

Greetings, fellow SCNPS members. Firstly, I want to thank Mary Morrison (president of the Piedmont Chapter), Piedmont Chapter members, and State Board members for all their efforts in putting together an enjoyable and informative symposium at Winthrop College this past May. We had a great agenda of speakers, workshops, and field trips, along with a great dinner and presentation by the Catawba Cultural Center on the cultural and botanical history of the Catawba Indian Nation. A personal highlight for me was closing the weekend with a kayaking tour through the spectacular bloom of rocky shoals spider lilies on the Catawba River at Landsford Canal State Park. If you haven't visited the park to see this treasure, I encourage you to make a trip this coming May. The Upstate Chapter will host our next annual symposium, planned for April 13, 14 & 15, 2012. More detailed planning info is available on the back page. The State Board of Directors met in August, and we all left with a full list of action items to accomplish, not the least of which is to recruit some of you talented folks to help us conduct society business. Harry Davis has been our webmaster for nine years. He was the main force behind the creation of our website, and he has done a great job of managing this essential resource. Many thanks, Harry, for your long-time dedication! Now, however, Harry would like to hand over the reins to someone new. So, if you have website skills and would like to help us, please contact me. We need someone to upgrade certain components, add some new features, and once we accomplish those tasks, the webmaster will be responsible for periodic maintenance of the site.

Kim Counts has served as our State Board Secretary starting in 2010, and she will continue her post until the end of this year. But unfortunately Kim needs to make a transition due to professional demands. We greatly appreciate Kim's service. Anyone with interests in serving as secretary for our State Board should also contact me. Finally, we also need support for our membership committee which is responsible for maintaining our member database and providing new members with information on the benefits of membership. You can contact Pam Howe, the membership committee chairperson, or me to learn more about our needs.

In the winter 2011 issue of the Journal, I reported on some restoration/preservation projects that were in the development stage through our grants committee. I am happy to report that we received a generous grant from the USDA Natural Resource Conservation Service Wildlife Habitat Incentive Program (WHIP) to performed continued restoration of the plant community at Lisa Matthews Memorial Bay in Bamberg County. This 52-acre Carolina Bay is owned and managed by the SCNPS and contains one of the most viable popula-

tions of Canby's dropwort (Oxypolis canbyi), a federally endangered species. The WHIP grant funds our work to restore longleaf pine habitat in the upland areas of the bay. Based on our research, longleaf forest was most likely the historical climax community in this part of the bay, and its restoration is a key component in maintaining the proper hydrology and soils, as well as the associated native floral and faunal diversity, for this special ecosystem. More details on this project can be found on our website (see http://www.scnps.org/activities.html).

We also were awarded a grant from the USDA Forest Service for an exciting project in the Sumter National Forest. The SCNPS is the sponsoring organization for this native canebrake (*Arundinaria gigantea*) habitat restoration along the Tyger River in Union County. We will be conducting this project in collaboration with Forest Service staff and contractors. Through this work we should learn much about techniques to restore this type of vegetation community which once dominated much of our state's stream and river corridors, but is now dominated by the invasive, non-native Chinese privet (*Ligustrum sinense*).

In closing, I would like to remind all members to be sure you are on our email listsery. In addition to our website and newsletters, this is one of the best ways to keep up with meetings, field trips, plant sales, lectures and other activities both at the chapter and state-wide levels. Here are instructions on signing up:

#### The SCNPS Email Listserv:

YahooGroups offers several ways to sign up...which can seem a bit intimidating. However, following the steps below should take you straight through the maze!

- Using the email address that you want to use on the ListServ, send an email to scnps-subscribe@yahoogroups.com
- 2. You will receive an automatic response: "Subject: Please confirm your request to join scnps"
- 3. Click the link provided in this email, which will take you to a web page which gives you the opportunity to:
   a) join this YahooGroup, or b) join this mailing list only
- 4. Click "Join this mailing list."
- 5. In 200 characters or less, tell the Moderator your name and address so that he can verify that you are a current member of SCNPS; then submit the form.
- 6. You will then receive two emails: a) one from YahooGroups with notes on using the ListServ and an invitation to join YahooGroups. Joining YahooGroups is optional, and b) one from the SCNPS Moderator welcoming you and providing tips on using the SCNPS ListServ.
- 7. You're done!

(continued on next page)

What if I want out?

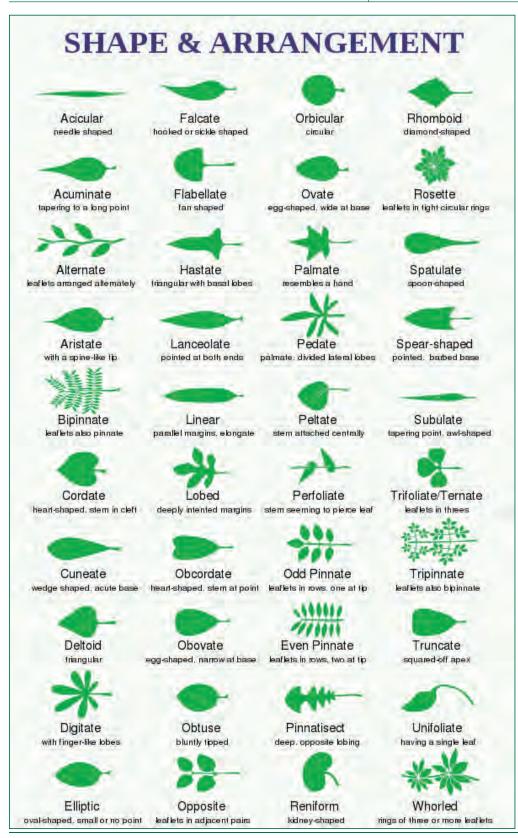
To remove yourself from the list at any time, send an email to: scnps-unsubscribe@yahoogroups.com
How do I update my email address?

Remove yourself as above, and subscribe again from your new email address.

What if I have a question?

If you have any questions or concerns about your subscription, please address them to scnps-owner@yahoogroups.com

Jeffery L. Beacham, SCNPS state president jeffbeacham@gmail.com



Illustrations of terminology for shape and arrangement of simple and compound leaves of forbs and trees. This figure is part of a more complete diagram created by McSush, and found at en.wikipedia.org/wiki/Leaf\_shape. Use of the material here does not imply any endorsement of the SC Native Plant Society or this Journal.

**Sweetgrass**, from page 1



Figure 2. This display on Highway 17 shows the variety of styles and forms that basket makers create with different combinations of native plants. Photo by author.

describe three of the plants they use as relatively abundant. Bulrush is a dominant species in freshwater and brackish marshes, long-leaf pine is found in rural areas, and palmetto, the South Carolina state tree, has long been a popular landscaping choice among homeowners. Sweetgrass, however, has become increasingly difficult to find because it grows in flats between coastal dunes and in maritime wet grasslands (Ohlandt 1992), landscapes that are popular sites for tourism development and private neighborhoods. While basket makers describe how sweetgrass has been 'paved over', they also point out that several neighborhoods have preserved or restored sweetgrass habitat and the plant has reappeared in yards and along roadsides as a popular ornamental prized for it's feathery-purple fall blooms (Hurley et al. 2008) [see Fig. 3]. Basket makers associate sweetgrass 'scarcity' with changing definitions of landownership and community that restrict access to all four plants, but these changes have made sweetgrass harvesting particularly difficult.

Historically, the basket-making community has relied on friendship, kinship, farm work, bartering, and 'understandings' with rural landowners to gain access to harvesting areas.

Residential development has created physical and social barriers to these traditional practices. Basket makers have responded by negotiating with landowners and land managers, gaining access to conservation and preservation sites where sweetgrass grows as well as home gardens and

new roadside plantings. Landscape ecologist Karl Ohlandt has served as a mediator between the basketmaking community and private neighborhood associations. He corroborates basket makers' claims that their method of 'pulling' sweetgrass is sustainable because it removes plant material that can choke out individual plants and encourages new growth during the summer months [see Fig. 4]. Combining this ecological argument with landowner reverence for this centuries-old craft. basket makers have found harvesting sites on Dewees and

Kiawah islands, hunting club properties, and privately owned natural areas throughout the lowcountry. Finding a reliable supply of sweetgrass is still no easy task, but through these types of relationships basket makers are preserving a craft with historical, cultural, and economic significance in their lives.

Beyond the relationships between harvesting and plant health, plant scientists have also become interested in basket maker knowledge of cultivation and geographic variability. As local supplies of wild sweetgrass dwindle, harvesting trips have expanded to include nearby states. Some basket makers can describe geographically specific characteristics of sweetgrass and can tell the difference between wild and cultivated plants. Citadel botanist Dr. Danny Gustafson is concerned that sweetgrass grown from seeds harvested in other parts of the country may have a negative effect on the persistence of



Figure 3. Clockwise from top left: Sweetgrass planted along a driveway on Spring Island, beneath palmetto trees in front of Addlestone Library at the College of Charleston, in a restoration site on Spring Island. Photos by author.



Figure 4. Karl Ohlandt holds blades of sweetgrass pulled from a home garden Photo by author.

local genotypes, piquing his interest in basket maker knowledge and local seed-stock collection (Gustafson et al. 2009). Gustafson, Ohlandt, and Dr. Robert Dufault at Clemson University have been at the forefront of planting projects that pair restoration and conservation with sweetgrass harvesting, and have provided basket makers with seedlings for their own gardens and yards [see Fig. 5].

In a forthcoming article for the journal Geoforum, my colleagues and I argue that the persistence of sweetgrass harvesting relies on relationships between the basket making community, landowners, and land managers/plant scientists (Grabbatin et al 2011). SCNPS members can play a pivotal role in forming and expanding these relationships. At an Upstate Chapter meeting in 2003, Clemson Herbarium curator Patrick McMillan recommended sweetgrass for its important ecological function and aesthetic value. Likewise the SCNPS Native Plant Alternatives list recommends sweetgrass as a substitute for the non-native invasive Miscanthus sinensis. As you plant this species in your home garden or identify it in local landscapes I hope you will also consider its value as a raw material for basket-making. Gardeners can offer seeds and young plants to basket makers or open access to their yards. Native plant enthusiasts can also speak to their neighbors or neighborhood associations about the ecological importance of this plant and offer harvesting as an environmentally sound management strategy. The relationships that sustain sweetgrass basketry today include personalized arrangements with individual basket makers and large-scale collaborations with associations like Sweetgrass Cultural Arts Festival Association. Whatever the scale or site, these relationships connect plants and people in an effort to build an ecologically, aesthetically, and culturally rich South Carolina landscape.

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Figure 5. Plants grown by Karl Ohlandt for landscaping and restoration projects. Photo by author.

## The Genus Baptisia in South Carolina

Bill Stringer

In my humble opinion, some of the most spectacular herbaceous perennials in our State are in the genus *Baptisia*. These beautiful native legumes share the generic common name of wild indigo, a name derived from their use as dyestuff plants by the Native Americans and early Europeans. In fact, *Baptisia* is from the Latin *baptisis*, or a dipping, relating to the dyeing procedure. The native American plant, *Baptisia tinctoria*, was cultivated in colonial times for a pale blue dye, but was a poor substitute for introduced Indigo (*Indigofera tinctoria*).

Baptisia species exhibit a peculiar trait of early canopy senescense. The canopy leaves and stems die and turn dark in late summer or early fall, considerably earlier than the first frost. The early change in color results from enzymatic reactions in the plant that create the blue pigment. This is most likely a day-length response. The senesced stems can break off at the soil level, thus creating a "tumbleweed", which no doubt aids in dispersing seeds. A crown atop the sturdy taproot produces large sub-surface buds that give rise to next year's plant canopy.

Members of the genus *Baptisia* are all nitrogen fixing legumes, and as such, play an important role in providing fixed nitrogen for natural plant communities. They are all long-lived perennials with sturdy branched taproot systems. *Baptisias* are found on mesic to dry soil sites, and in open to partially forested sites where they get partial to full sun. Thus you can commonly spot Baptisias along road and utility rights-of-way, or in prairie-like, or glady sites.

Baptisia species are not seriously affected by pests. The most obvious insect activity on Baptisia comes from seed weevils. One such weevil is Apion rostrum, the adult of which lays her eggs in the young green pods, where the emerging larvae eat some of the forming seeds. Young adult weevils are commonly found when mature pods are opened to harvest the seeds. Scientists estimate that up to 25% of the seed production is lost to weevils. In addition, larvae of Wild Indigo Duskywing, Hoary Edge, Southern Dogface, and Orange Sulfur butterflies, and Black-Spotted Prominent moth can be found on Baptisia species, but larval herbivory never appears to be substantial, probably because Baptisia's contain alkaloids called quinolizidines that are toxic to herbivores.

The *Baptisia*'s make wonderful contributions to our natural and planted landscapes. They produce copious flowers in a variety of colors. Plants can persist for many years in sunny to partially shaded sites. They have deep roots that allow them to survive droughty growing seasons, and can persist on poor acid soils, where they

produce their own nitrogen fertilizer. Watch for them on you local naturalized roadsides next summer!

There are eight species of *Baptisia* found in South Carolina.

#### Spiked wild indigo - Baptisia albescens

This is probably the most common *Baptisia* in South Carolina, found in almost every county. Plants are commonly tall (ranging from two to four feet) and cylindrical in shape. The leaves are commonly bluishgreen, and die to a blue-black color in early fall. The flowers are white to ivory in color, densely borne on terminal blue to purple-stemmed, glaucous racemes. The fruit is a pod (legume) commonly about the diameter of a wooden pencil by 1.5 inches long, and yellowishbrown at maturity.

#### White wild indigo - Baptisia alba

This species is very similar to *B. albescens*, in plant size and shape, flower size and color. It is easiest to differentiate from *B. albescens* in fruit, with the pods being much larger in diameter. Also, the leaves are often considerably larger. The leaves die to a blue-black color in early fall. This species is found all over SC, in similar habitats as *B. albescens*, but is most common in the lower Piedmont and upper Coastal Plain counties.

#### Blue wild indigo - Baptisia australis

This species grows from two to four feet tall. It has large blue-green leaves, much larger than *B. alba* or *albescens*. It is spectacular in bloom, exhibiting large pale blue to deep blue flowers in dense racemes. The pods are large and inflated, the diameter commonly as great as ½ the pod length. The leaves die to a blue-black color in early fall. This species has been widely planted, but is thought to have only a small area of natural occurrence in SC, in some of the Sandhills counties.

## **Long-bract wild indigo** - a.k.a. Creamy wild indigo - Baptisia bracteata

This Baptisia is lower growing that most of the other species. It forms dense rounded clumps (18 inches or so tall), with yellow-green leaves and cream-yellow blooms in downward-pointing racemes. The pods are inflated (3/4 inch in diameter) and quickly turn a dark blue-black (early August). By early September, the canopy has died and turned dark gray along roadsides in the mid- to lower Piedmont and Sandhills. The entire top of the plant dies, right back to the ground.

#### Gray-hairy wild indigo - Baptisia cinerea

This species grows upright to 2-2.5 feet tall, with deep yellow flowers in terminal racemes. The stems are covered with short prostrate gray hairs. It is unique in having long narrow stipules that adhere to the plant. The pod is inflated, thick-walled and strong at maturity. The species is most commonly found in the Sandhills and in thin-forested sites in sandy soils.

#### Gopherweed - Baptisia lanceolata

A good distinguishing characteristic of gopherweed is the distinctly lanceolate leaflets on its trifoliate leaves, which are 5X as long as they are wide. The leaves are short-pubescent, particularly on the undersides. The flowers are a bright yellow and borne 2 to 4 on short flowering branches. The fruit is a globose pod (3/4 inch) with a sizeable beaked point. Gopherweed is found on dry sandy soils in the Sandhills and upper Coastal Plain. It is similar in appearance to *B. cinerea*.

#### Catbells - Baptisia perfoliata

This species is easily distinguished from every other species in the genus. It has unifoliate leaves, which are sessile and perfoliate to the stem, looking ever so

#### Spiked wild indigo - Baptisia albescens





Baptisia albescens, courtesy of www.namethatplant.net

much like a small eucalyptus. The bright yellow flowers are borne singly in the axil between the leaf and the stem. Sturdy round pods (up to ½ inch in diameter) are formed, and contain as many as four seeds per pod. The common name is derived from the appearance of the seed pods. Catbells is found only in the lower fringe of the Piedmont and the Sandhills.

#### Horsefly weed - Baptisia tinctoria

This is the small *Baptisia*. The plant can be 2-3 feet tall, but has small leaves, small yellow flowers and small fruits. The leaves are trifoliate, with leaflets up to  $\frac{3}{4}$  inch long. The flowers are  $\frac{1}{2}$  inch long, bright yellow and occur singly. The pods are up to about  $\frac{3}{8}$  inch long,  $\frac{1}{4}$  inch in diameter and usually contain 1 to 4 seeds. Legend has it that a *B. tinctoria* plant attached to your horse's collar would ward off horseflies from the horse and the buggy passengers. A wonderful thing if you were squiring your best girl on a Sunday afternoon! Also, it was the Baptisia most commonly used to produce a blue dye. It is found throughout the State.

#### White wild indigo - Baptisia alba



Baptisia alba, courtesy of John Ruter, University of Georgia, Bugwood.org



Baptisia alba pods courtesy of www.robsplants.com

#### Blue wild indigo - Baptisia australis



Baptisia australis. Courtesy of Dr. Paul Cappiello, Yew Dell Gardens



Baptisia australis. Lisa J. Miner, http://www.plantilus.com/

#### Gopherweed - Baptisia lanceolata



Baptisia lanceolata, Chris Evans, River to River CWMA, Bugwood.org



B. lanceolata pod, Chris Evans, River to River CWMA, Bugwood.org

## **Long-bract wild indigo** - a.k.a. Creamy wild indigo - Baptisia bracteata



Baptisia bracteata in bloom. Courtesy of Larry Trekell, Bugwood.org



Baptisia bracteata pods. Courtesy of Weedsworth.com

#### Gray-hairy wild indigo - Baptisia cinerea



Baptisia cinerea. Courtesy of Dan Tenaglia at Alabamaplants.com



Baptisia cinerea. Courtesy of Dan Tenaglia at Alabamaplants.com

					Vegetative characters of Baptisia species						
Genus	species	lealets	leaf connection	leaflet shape*	leaflet length	Stipules	pubescence?	flower color	Raceme location	flowers/ raceme	Legume characteristics
Baptisia	alba	3	petiolate	elliptic	4 cm	small, late deciduous	glabrous	white	stem tips	many	thin-walled, inflated (to 25 mm), oval
Baptisia	albescens	3	petiolate	elliptic	4 cm	small, deciduous	glabrous	white	stem tips	many	thin-walled, long, narrow (to 9 mm)
Baptisia	australis	3	petiolate	obovate	6 cm	persistent	glabrous	blue	stem tips	many	thin-walled, 25 mm diam., oval
Baptisia	bracteata	3	petiolate	elliptic	4 cm	large, persistent	pubescent	cream	descending branches	many	inflated (to 25 mm diam.), oval
Baptisia	cinerea	3	petiolate	elliptic	6 cm	persistent	pubescent	yellow	lateral	many	inflated, hard, oval
Baptisia	lanceolata	3	petiolate	lanceolate	to 8 cm	tiny, deciduous	pubescent	yellow	all over	2 - 4	thin-walled, inflated, ovate/ spiked
Baptisia	perfoliata	1	perfoliate	round	4 cm	none	glabrous	yellow	no racemes	1 per leaf axil	hard walled, spherical (to 15 mm diam.)
Baptisia	tinctoria	3	petiolate	ovate	1 cm	tiny, deciduous	glabrous	yellow	many on branches	few	thin-walled, spherical (to 10 mm diam.)

#### Catbells - Baptisia perfoliata



Baptisia perfoliata, courtesy of the author.



Baptisia perfoliata fruit

#### Horsefly weed - Baptisia tinctoria



Baptisia tinctoria, courtesy of Tom Barnes, via http://plants.usda.gov



Baptisia tinctoria.

Courtesy of SC Plant Atlas
(http://cricket.biol.sc.edu/
acmoore/scplantatlas.html)

## Dandelions, True or False?

Jan Haldeman Professor Emerita, Erskine College

If you ever notice commercials for herbicides, it seems to be "Round-up" time for dandelions just about all year long now. Especially if you are trying to maintain an ecologically unstable monoculture called a lawn. But dandelions have at least two look-a-likes in our area, which can be considered second cousins once, maybe twice, removed from the common dandelion (or what I like to call "true" dandelion) (Figure 1), which is naturalized from Europe.



Figure 1. "True" dandelion (Taraxacum officinale) Photo by author

The two "imposters" which are so often seen in South Carolina along road shoulders, and in fields and lawns during the warm season are <a href="Cat's Ear">Cat's Ear</a>, Hypochaeris radicata (Figure 2), also naturalized from Europe, and our native <a href="Carolina False Dande-lion">Carolina False Dande-lion</a>, Pyrropappus carolinianus (Figure 3). These two and "true" dandelion have similar yellow blossoms composed of many tiny individual flower units which appear as one flower, a distinguishing feature of the family Asteraceae. Blossoms are a composite of many individual flowers and there-

fore, Compositae is another name for this family. Some family members, like sunflowers and daisies, have two forms of flower units, disc flowers forming a blossom's center, and ray flowers circling the periphery and forming what appear to be petals. The one true dandelion and the two "imposters" have blossoms of ray flowers only.

So, how do we discriminate among these three "dandeli-

ons"? Since the blossoms look a lot alike, you need to pay attention to other parts, in particular the leaves and flowering stem. Even though all three have similarly shaped coarsely toothed leaves forming rosettes at the plant's base, ONLY cat's ear has leaves covered with stiff hairs. These fuzzy leaves are responsible for its common name, and it has other common names including hairy dandelion. Cat's ear and Carolina false dandelion have leafless solid, branching green stems with several blossoms.

have leafless hollow usually beige colored stems, and produce only one blossom per flowering stem. Carolina False Dandelion has a leafy stem, and is also called Leafy Stem Dandelion. In addition, blooms of Cat's Ear and True Dandelion are a chrome yellow, while those of Carolina False Dandelion often may look more like a "lemon" yellow. Carolina false dandelion is also called Carolina desert

True dandelions



Figure 2. Cat's ear (Hypochaeris radicata) Photo by author.

chicory, although its range doesn't extend as far west as the desert states. All three plants make spherical clusters of "parachuted" fruits that scatter about on the wind.

The scientific name for "True" Dandelion, *Taraxacum officinale*, comes from Greek words, taraxos=disorder, akos=remedy, and officinale = official. Therefore, the dandelion, disdained star of herbicide commercials, is actually a long time proven "official" remedy for kidney, digestive and liver disorders. The



Figure 3. Carolina false dandelion (Pyrropappus carolinianus). Photo by author

common name is corrupted from French Dent=tooth(teeth), de=of, and Leon=lion, thus in French, dandelion is *dent de leon*, or "teeth of the lion," referring to its coarsely sharptoothed leaves. And in German dandelion is *loewenzahn* which also translates as "lion's tooth."

All parts of True Dandelions are edible and healthful. Fresh greens (bitter-tasting like endive) and blossoms can be used in fresh salads, and greens can be served as a pot herb. Raw greens contain as much calcium and Vitamins A, C, thiamine, and riboflavin as most multi-vitamins. Roots can be roasted and used as a coffee substitute. To make dandelion 'coffee,' gather, wash, dry and then roast the roots for four hours or until dark brown and cracking. Then grind them, and prepare as you would coffee beans. Flowers and whole plants are used to brew Eastern gamagrass wine and beer.

It is no wonder that early on, arriving colonists from Europe included in their luggage highly valued seeds of an important food and medicinal plant such as Dandelion. They as well as other valued plants from native lands were grown in colonial gardens, from which they and many other species, intentionally or accidentally, spread throughout our country. Cat's Ear and Carolina False Dandelion are also edible, and folks who have tried them say that they are not as bitter as Common Dandelion. Some medicinal properties similar to True Dandelions have been reported for Cat's Ear, and even a few for Carolina False Dandelion.

With respect to Cat's ear, as it turns out, South Carolina is home to two additional quite similar species, Smooth Cat's Ear, Hypochaeris glabra, an annual with leaves that are less hairy, and Brazilian Cat's Ear, Hypochaeris chillensis, whose flowering stalks do have some leaves near

	Flowering Stalk	Leaves	Growth Cycle
Hairy Cat's Ear	Branched Solid No stem leaves	Lobed, hairy	Perennial
"True" Dandelion	Not branched Hollow No stem leaves	Sharp toothed Smooth, not hairy	Perennial
Carolina False Dandelion	Branched and Solid Some stem leaves	Sharp toothed, Smooth, not hairy	Annual/Biennial
Also, see Figure 4 for o	comparison		



Figure 4. From left, Cat's Ear, Carolina False Dandelion, and True Dandelion. Photo by author.

its base. But with close inspection, these, like Hairy Cat's Ear, can be distinguished from Carolina False and "True" Dandelions.

And since the Aster family is so large, it includes even more dandelion look-a-likes. To name only a few, there are Hawkweeds in the genus *Hieracium*, Hawk's Beards in the genus *Crepsis*, and Dwarf dandelions in the genus *Krigia*, each of which includes several similar yellow-flowered species with stories to tell as well.

## The Journal of the South Carolina Native Plant Society

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www.scnps.org

# South Carolina Native Plant Society 15th Annual Native Plant Symposium Native Plants: Living History Lessons

## Madren Center, Clemson University April 13, 14 & 15, 2012

Native plants are attractive and resourceful collaborators in natural communities, and they increase the beauty and sustainability of our landscapes. In addition, they are living, breathing (well, transpiring!) lessons on the history of the place where they are found. American native plants, by definition, have occupied their physiographic space for at least 500 years. In truth, they are surviving descendants of the natural ecosystems that occupied that place in pre-Columbian times, in pre-Ice Age times, in pre-human times, and far beyond that.

Native elk and bison disappeared from the Carolinas after European settlement, but we still have Indiangrass and little bluestem. The mastodons were ushered out as early man moved in, but we still have remnant spruce and fir forests. The Pleistocene ice sheet has retreated from the Ohio River to the Arctic and to the highest parts of the Rockies, but we still find boreal forest plants in Canada and in the mountains of the Carolinas. These surviving native plants can teach us about what was here before us, and give us clues about what happened in the intervening time period. With a little luck, they will be here to speak to our children's children about the conditions we encountered, and that we created.

Our annual Native Plant Symposium will feature Philip Juras, a wonderful writer and painter of current and historic native plant landscapes. He will host a book signing on Friday evening. Recently he has taken on the task of rendering topographic and plant community views of important sites from William Bartram's travels, working from historical site descriptions and from remnants of these and the few similar sites still available. On Saturday evening Philip will discuss this effort and show us some of his work.

On Saturday and Sunday, we will feature field trips to explore several such remnant sites in the Oconee-Pickens-Greenville-Anderson counties area. We will see remnant prairie-like sites, as well as several forested sites that exhibit the recovery of natural native communities from recent episodes of exploitative deforestation.

On Saturday, we will offer on-site workshops (limited to no hiking involved) at the SC Botanical Garden and the SC DNR office grounds that will provide hands-on experience in devising environmentally sound landscapes such as run-off trapping rain gardens. Another workshop will be devoted to learning about the role and function of fungal species in natural communities.

So, plan now to reserve April 13-15, 2012 to learn some history from the native plant communities of South Carolina's Mountains and upper Piedmont. An informational brochure and registration form will be available by early February.

NOTE: A block of hotel rooms at the Madren Center's James Martin Inn has been reserved for us. To register for a room, call 864-654-9020 (888-654-9020-Toll free) or via e-mail at jfminn@clemson.edu. Please indicate that you are participating in the Native Plant Symposium. We will lose half of the unreserved rooms on February 12, and the other half on February 27, so reserve your room as soon as feasible.



Keowee Valley c. 1775 ( A Bartram stop) Pickens County, South Carolina. Oil on Canvas by Philip Juras.