



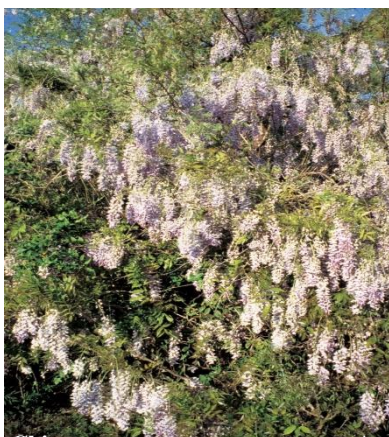
Quail Times

November 2020

Invasive Species Spotlight Chinese/Japanese Wisteria

By: Jeff Fellers – Clemson Extension

Non-native wisterias have pretty, showy flowers that many people are attracted to. The flowers appear March through May. Wisteria was introduced from Asia, in the early 1800's, and served as a traditional southern porch vine. Unfortunately, it escaped and now invades sections of our woodlands and can greatly reduce diversity where it takes over.



Wisteria is a deciduous woody vine that can grow up to 70 feet long. As the vines climb up trees it reduces sunlight to the forest floor and can also damage and/or kill the trees it climbs on.

Wisteria produce fruits and seeds from July to November, in a flattened legume pod. The seeds are large and primarily dispersed by water. However, wisteria can

root at nodes when the vine is on the ground in the leaf litter.

Control Methods:

- **Foliar** – thoroughly wet all leaves with 1 of the following herbicides.
 - July to October
 - Garlon 4 as a 4 percent solution (5 ounces per 1 gallon of water)
 - Glyphosate as a 4 - 5 percent solution. (5-6 ounces per 1 gallon of water)

- July to September
 - Transline as a 0.5 percent solution in water (.6 ounces per 1 gallon of water). Use when safety to surrounding vegetation is desired.
- **Cut Stem** – Cut the vine as close to the ground as possible and immediately treat the cut surface attached to the ground
 - Growing season through early winter
 - Glyphosate or triclopyr – 25 to 50 % solution applied to the cut surface. (32 - 64 ounces per 1 gallon of water). May need to treat re-sprouts with a foliar application at a later date.
- **Basal Bark** – Spray the bottom 12 to 15 inches of the vine. This can damage desired vegetation. Be sure to use a basal oil and penetrant when mixing.
 - Garlon 4 – 20 to 30 percent solution. (25 – 38 ounces per gallon mix)

Keep in mind that many of these will not be a once and done. It may take several treatments to fully control the wisteria.

References:

1. Nonnative Invasive Plants of the Southern Forest: A Field Guide for Identification and Control.
https://www.srs.fs.usda.gov/pubs/gtr/gtr_srs062/
2. Invasive and Exotic Species of North America: Chinese Wisteria.
https://www.invasive.org/library/FLFSNoxWeeds/chinese_wisteria.html

Native Species Spotlight Shrubs for Wildlife

By: Gary Peters – NRCS

Its fall, time to relax a little; family, football, holidays, hunting, and more. It's also the time to begin getting ready to burn, ordering seeds for next year, and getting those trees and shrubs in the ground. There are literally dozens of choices for planting good wildlife food and cover in hedges, fencerows, field borders, or thickets. The best combination is one that has something to offer all season long. Countless wildlife species including wild turkey, quail, and

white-tailed deer forage on the fruits and seeds of native woody plants like persimmon, blueberries, blackberries, sassafras, sumacs, holly, and hawthorns. The safety and shelter of overhead cover is critically important to rabbits and small mammals, as well as quail and other song birds. The insects attracted by flowering woody plants are important to shrubland and grassland bird species like quail, sparrows, warblers, vireos, eastern kingbird, eastern towhee, and eastern bluebird. Native fruit bearing plants also provide nectar when in bloom and act as larval hosts for a wide variety of pollinators including butterflies, moths, and bees. Bees need all the help they can get.

If you are in dry upland soils, try a blend of 4 or 5 different species that have different attributes. Here are some suggestions from the Natural Resource Conservation Service:

- Persimmon, *Diospyros virginiana*, tree uplands, old fields statewide
- Black Gum, *Nyssa sylvatica*, tree uplands and low woods statewide
- Redbud, *Cercis canadensis*, medium tree uplands, dry to moist statewide
- Flowering Dogwood, *Cornus florida*, medium tree moist uplands, slopes statewide
- Wild Black Cherry, *Prunus serotina*, medium tree anywhere, dry to moist soil statewide
- Shadblow Serviceberry, *Amelanchier canadensis*, small tree sandy uplands coastal plain, piedmont Coastal Plain
- Sassafras, *Sassafras albidum*, small tree moist, well-drained sandy loams statewide
- Chinquapin, *Castanea pumila*, large shrub dry woods, old fields statewide
- Cockspur Hawthorn, *Crataegus crus-galli*, large shrub dry to moist statewide
- One flower Hawthorn, *Crataegus uniflora*, large shrub dry statewide
- Lead Plant/False Indigobush, *Amorpha herbacea*, shrub dry upland statewide
- Beautyberry, *Callicarpa Americana*, shrub dry to wet statewide



Black Gum



Sassafras



One Flower Hawthorn

- New Jersey Tea, *Ceanothus americanus*, shrub well drained, open, sandy soils statewide
- Chickasaw Plum, *Prunus angustifolia*, shrub moist to dry statewide
- Blue Haw, Rusty Black Haw, *Viburnum rufidulum*, shrub dry soils statewide



New Jersey Tea

In wetter areas consider a mixture of some of these;

- Wild Black Cherry, *Prunus serotina*, medium tree anywhere, dry to moist soil statewide
- Shadblow Serviceberry, *Amelanchier canadensis*, small tree sandy uplands coastal plain, piedmont
- Serviceberry, *Amelanchier obovalis*, small tree moist soil coastal plain, piedmont
- Paw, *Asimina triloba*, small tree moist soil, slopes piedmont, mtns
- Hazel-nut, *Corylus Americana*, shrub rich woods statewide
- Silky Dogwood, *Cornus amomum*, small tree moist soil statewide
- Swamp/Stiff Dogwood, *Cornus stricta*, *Cornus foemina*, small tree moist soil statewide
- Deciduous Holly, Possumhaw, *Ilex decidua*, (keeps berries in winter) small tree moist soil coastal plain, piedmont
- Hawthorn, *Crataegus viridis*, *C. spathulata*, *C. marshallii*, large shrub alluvial woods, swamp forests Piedmont, Coastal Plain
- Winterberry, *Ilex verticillate*, small tree moist soil statewide
- Southern Crabapple, *Malus angustifolia*, small tree well-drained, moist soil statewide



Wild Black Cherry



Hazel-nut



Winterberry

South Carolina Bobwhite Online Public Quail Observation Survey – 2020

By: Michael Small – SC DNR

- Red Mulberry, *Morus rubra* small tree moist soil statewide
- Beautyberry, *Callicarpa Americana*, shrub dry to wet statewide
- Strawberry Bush, *Euonymus Americana*, shrub moist, shady statewide
- Wax Myrtle/Southern, Bayberry, *Morella cerifera* or *Myrica cerifera*, shrub wet to dry coastal plain, piedmont
- Ninebark, *Physocarpus opulifolius*, shrub bogs, stream banks, moist bluffs statewide
- American Plum, *Prunus americana*, shrub moist to dry coastal plain, piedmont
- Chickasaw Plum, *Prunus angustifolia*, shrub moist to dry statewide
- Hog Plum, Flatwoods Plum, *Prunus umbellata*, shrub moist to dry statewide
- Highbush Blueberry, *Vaccinium corymbosum*, shrub moist soil statewide
- Black-berried Highbush Blueberry, *Vaccinium fuscatum (atrococcum)*, shrub dry to wet statewide
- Squaw Huckleberry, Deerberry, *Vaccinium stamineum*, shrub moist to dry statewide
- Small Black Blueberry, *Vaccinium tenellum*, shrub dry upland coastal plain, piedmont
- Arrowwood, *Viburnum dentatum*, shrub dry to wet statewide
- Coral Honeysuckle, *Lonicera sempervirens*, vine moist to dry statewide
- Red Chokeberry, *Photinia pyrifolia*, (*Aronia arbutifolia*), small tree moist woods, swamps, bogs, bluffs statewide
- Common Elderberry, *Sambucus canadensis*, shrub rich soils along riverbanks and forest edges statewide



Red Mulberry



Chickasaw Plum



Common Elderberry

The South Carolina Department of Natural Resources Small Game Project initiated a new annual survey aimed at recording bobwhite quail (*Colinus virginianus*) sightings made by members of the public, consisting of interested individuals. This survey was initiated during the 2020 calendar year. The purpose of the Public Quail Survey is to collect quantitative information on quail observations (audio, visual, or both). This will aid in monitoring quail populations across the state between years. Because of the substantial success of this first year of data collection, we intend to continue using this method to aid biologists in tracking quail population trends, based on public observations across the state.

Methods

We created an online app to allow the public to report bobwhite quail observations and advertised the survey using social media platforms for the SCDNR. Interested individuals can participate by following the following link, <https://arcg.is/01z8u4>, and answering a series of simple questions when a bobwhite quail(s) is observed. The process is very user friendly and is designed to be used on a smart phone! Results will be reported for the period of November 1 through October 31 each year (with the exception of this first year which has an abbreviated period because of the initiation date). Reports will be made available to the public and personal information will not be shared.

Results and Discussion

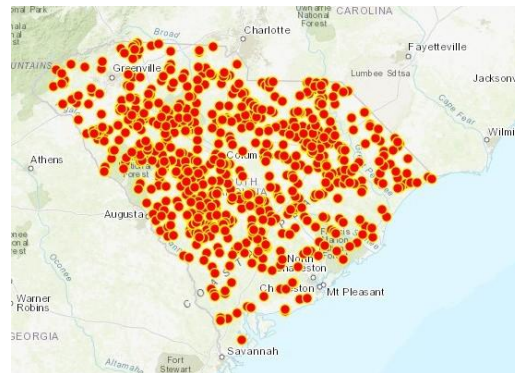


Figure 1. All quail observations for the 2020 survey period.

We received 985 total observation responses (Figure 1) for the period of May 21 – October 5, 2020, for this initial year of data collection. Of these, 637 responses had all data fields reported in the

responder's fields for the survey. All counties in South Carolina were represented in the sample (Figure 2).

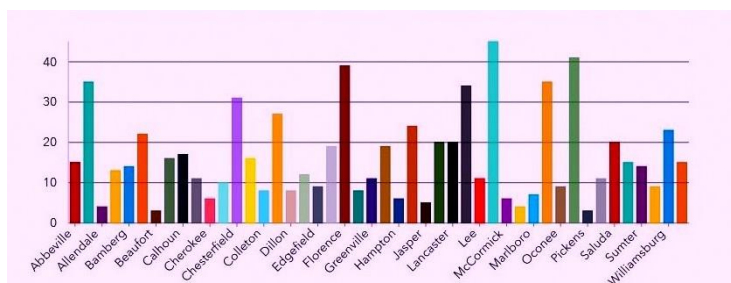


Figure 2. Graph of observations by county for the 2020 survey period.

Survey respondents reported a total of 444 audio, 245 visual, and 251 both visual and audio observations. Average distance for observations was 115 ft and ranged from 0 – 2000 ft (Figure 3). Also, average number of quail per observation were 5.33 (Figure 4).

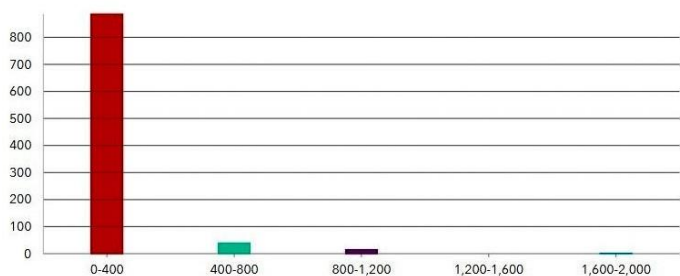


Figure 3. Graph of distances for all observations for the 2020 survey period.

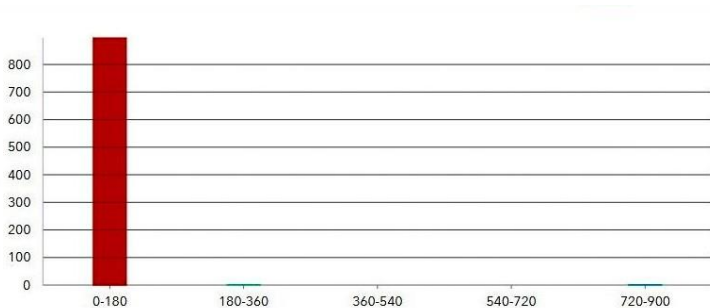


Figure 4. Graph of number of quail observed for all observations for the 2020 survey period (note: some observers combined all their observations – thus some very high numbers).

The top five reporting counties, by percentage were Lexington (45), Orangeburg (41), Florence (39), Aiken (35), and Newberry (35). The lowest five reporting counties were Pickens (3), Beaufort (3), Marion (4), Allendale (4), and Jasper (5) (Figure 5).

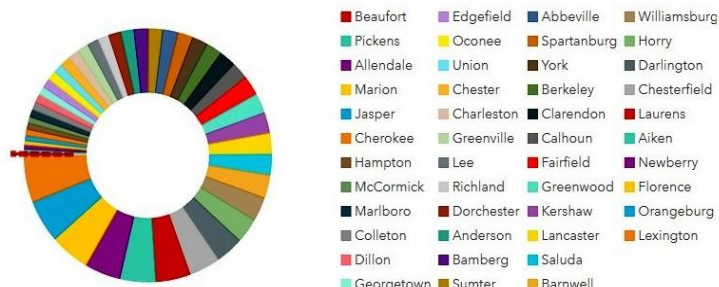


Figure 5. Counties reporting rates by percentage of observations.

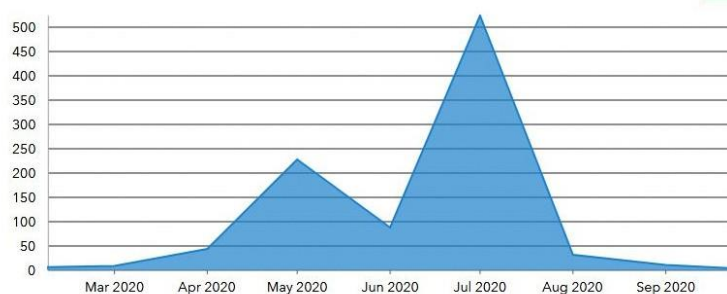


Figure 6. Number of observations reported by date.

Plans are underway to continue South Carolina Bobwhite Online Public Quail Observation Survey for 2020-21. Efforts are ongoing to increase the number of cooperators and all avid quail observers are encouraged to participate. Contact the SCDNR Small Game Project, P.O. Box 167, Columbia, SC 29202 (telephone 803-528-3053) if you have difficulty navigating the app.

Prescribed Burning in Winter

By: Jacob McClain – Quail Forever Biologist

Winter is a great time to burn not only logs in a fireplace, but also the understory of pine stands. While March-May burning is preferable to set back invading hardwoods, winter provides a good window to kill young pines, consume thatch and pine straw, improve bare ground, and boost the growth of desirable forbs once spring arrives. Here are a few things to consider when planning to burn this winter:

Identifying a Stand: Look for stands with abundant one-hour fuels (grass, leaves, litter, pine, straw, etc.) and/or young, regenerating pines (< 2.5' tall). Stands with abundant sweetgum, oak, or other hardwood saplings should be burned in the Spring for better results.

Keep Burn Unit Size Small: Burning in the winter greatly reduces the amount of cover within a stand. To minimize the effect on quail and other wildlife, keep winter burn units small (<50 acres) and aim to burn late in the season to reduce the amount of days that a particular stand lacks cover.

Create and Follow a Written Prescribed Fire Plan: As with burning during any season, having a plan is key to both the success and safety of a burn. Find a prescribed fire template at: <http://www.trees.sc.gov/3207-7.pdf>

Follow Smoke Management Guidelines: Notify the South Carolina Forestry Commission (1-800-777-3473) prior to burning to receive permission and ensure you are within the limits of the law. For more information go to: <https://www.state.sc.us/forest/fforest.htm> AND <https://www.state.sc.us/forest/smg05.pdf>

Use the Right Equipment: For those interested in doing their own burns, Newberry Soil and Water has a burn trailer that can be rented by the day with drip torches, rakes, and other equipment needed. For novice burners, winter can be a great time to get your feet wet (hot?), as ambient temps are relatively low, and a simple backing fire can effectively be used in many cases. For more information about the burn trailer, contact Joseph Berry at (803-597-3160).

Prepare Firebreaks: Even if you do not plan to burn till early spring, winter is a great time to establish or conduct maintenance on firebreaks. Firebreaks can be natural (bluffs, creeks, etc.), constructed (dozed, disked, hand lines, etc.), or existing (cultivated fields & roads). Previously established firebreaks can be disked or dozed to mineral soil and should be a minimum of 10' wide. For more details on using different kinds of firebreaks, check out this document from OSU. <http://pods.dasn.okstate.edu/docushare/dsweb/Get/Document-8542/NREM-2890web.pdf>

Remember that fire is your best and most inexpensive management tool in creating and maintaining good wildlife habitat. Widening your burning window will allow you to successfully burn more acreage in a year and not be entirely dependent on unpredictable spring weather when it is often too wet to carry fire.

Time to Plan your Next Prescribed Burn **By: Gary Peters – NRCS**

Now that the fall rains have started and the leaves are falling, it's getting easier to see those parts of your property that need a little attention, trees to cut, water bars to mend, and lime to spread. It's also the best time to thoughtfully plan for which areas of your property are best suited for burning in the spring, where to refresh the firebreaks, and lining up the equipment.

Some things to look for are sweetgum seedlings and saplings beginning to dominate the understory, and excessive buildup of needles and leaves which is essentially fuel. Both require different approaches to effectively conduct a burn. It's not rocket science, but there are a few parameters you must pay attention to; category day, fuel moisture, days since rain, wind speed, wind direction, humidity, and fuel type.

If you are not experienced at burning, attend a 'Learn to Burn' workshop, or any of the Certified Prescribed Fire Managers courses offered by the South Carolina Forestry Commission. Dates for the next ones that are scheduled are:

January 13, 2021
January 27, 2021
February 10, 2021

Columbia, SC
Florence, SC
Moncks Corner, SC

Contact Leslie Woodham at (803) 896-8809 for more information.

As for equipment, all the basic hand tools that you will need to safely implement a prescribed burn are available from the Newberry Soil and Water Conservation District prescribed fire trailer. <https://www.newberryswcd.com/burn>

The burn trailer is stocked with basic firefighting tools and equipment available for landowners, practitioners, and professionals to use in Newberry and surrounding counties.



There is a daily fee of \$50 for the first day, and a \$10 fee for every day thereafter. A damage deposit of \$50 will also be required.

Don't need a whole trailer full of supplies? Call us and we'll work with you to meet your needs on a case by case basis.

To reserve the burn trailer simply email: NewberrySoilAndWater@gmail.com or, call Joseph Berry at 803-597-3160.

Landowner Workshops During the Covid-19 Pandemic

By: Breck Carmichael – SC DNR

Normally, the Indian Creek Partnership would hold 2 landowner workshops, one in the Spring and one in the Fall. However, the Covid-19 pandemic has put a hold on most in-person meetings and workshops of this type. Back in the spring, the classroom presentations from the Bobwhite Quail Seminar Series- a collaborative effort of SC Bobwhite Initiative partners, the SC Department of Natural Resources, and Clemson Extension Service, were placed on both You Tube (https://bit.ly/bobwhite_seminar_series) and on the Clemson

University Forestry and Natural Resources web page
(<https://clemson.edu/extension/forestry/media1/index.html>).

Additionally, Clemson and DNR have collaborated on a new quail habitat management video featuring in the field instruction. This video is almost complete and will be posted on the Clemson web page listed above soon. Keep checking for it as it will be well worth your time to view if you are interested in habitat management techniques.

Help "Bring Back the Whistle"!

Wildlife Habitat Management Educational Short Videos

By: Jacob McClain – Quail Forever Biologist

In addition to the longer workshop videos described above, the Indian Creek partners have made several educational videos on wildlife habitat management in the past eight months. Many of these have been shared on the South Carolina Bobwhite Initiative (SCBI) Facebook page, but can now be found on the SCBI YouTube page at: <https://bit.ly/3dP3Urb>. Below are brief descriptions of several recently posted videos to check out.

Video #1: *Michael Hook's Best Bush Hogging Tips* features our SCDNR Small Game Program Coordinator demonstrating a quail-friendly practice with a bush hog.

Video #2: *Logging Decks to Brood Rearing Patches* shows Quail Forever biologist Jake McClain discussing converting logging decks to valuable brood habitat by cleaning off logging slash, disking, and seeding a mix of native annuals.

Video #3: *Important Plants: Blackberry* highlights a few the many benefits of this bramble for quail and other wildlife and discusses the desired patch size and distribution on the landscape.

Video #4: *Importance of Opening in Timber* discusses how small clear-cuts or natural openings strategically placed within dense timber can provide suitable habitat for various kinds of wildlife.

Video #5: *Habitat 101* features QF biologist Jake McClain using two sides of one road to discuss how timber management influences food and cover abundance for all wildlife that live on the ground, but especially quail.

Video #6: *Brood Patch Next to Burned Area* highlights a large opening on the Indian Creek Quail Focal Area of Sumter National Forest where ragweed was used to establish insect-

attracting brood cover as well as a whistling bobwhite singing from an adjacent mature pine stand.

Video #7: *All Three Needs of Bobwhite Chicks in One Place* features QF biologist Jake McClain who discusses the rule of thirds in quail habitat management.

Video #8: *Dan Peebles and 2-3 Yr. Rotation* stars the SCDNR Private Lands Biologist from Orangeburg discussing the importance of frequent fire when managing pine stands for quail and the consequences of not staying on schedule.

The Indian Creek partners will continue to make additional videos on wildlife biology, habitat management, and success stories which will be posted to the SC Bobwhite Initiative Facebook and YouTube pages. Stay tuned!

Forest Management Calendar SC Forestry Commission

Forest Management Calendar Provided by SC Forestry Commission												
Treatment	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Request A Forest Stewardship Plan												
Apply For Equip Or Cost-Share Programs With NRCS												
Apply For Cost-Share Assistance with The SC Forestry Commission												
Road Maintenance												
Site Preparation Burning												
Insect & Disease Inspection												
Chemical Herbaceous Weed												
Chemical Site Preparation/Release												
Fire Breaks												
Food Plot Planting												
Harvesting (Includes Thinning)												
Mechanical Site Preparation												
Order Seedlings												
Prescribed Burning												
Tree Planting												

Indicates appropriate month for technique

Due to Funding we do not know how long we will be able to continue to mail this newsletter out by paper mail.

If you receive this newsletter by paper mail and would like to continue to receive it, please sign up for our email list serve.

Please send your name, mailing address, and email address to fellers@clemson.edu and be sure to include Indian Creek email list serve in the subject line.