How This List Was Developed

The October 2014 revision is the fourth revision of the **Invasive Plant Pest Species in South Carolina** list, first published in 2004. That list was initiated by Dr. Larry Nelson of Clemson University and was developed by the List Committee of the South Carolina Exotic Pest Plant Council. The development of the list included reviews by professional and amateur botanists, ecologists, and resource managers. All comments were considered, and a consensus approach was accepted.

The review process for the 2011 revision of this list was similar to those in 2004 and 2008 with the additional step of ranking species using standardized ranking criteria (see criteria). The 2014 review followed suit. The list was again revised based on current distribution and new species suggestions. Over 50 professional and amateur botanists, ecologists, biologists, agronomists, invasive species specialists, foresters, resource managers, horticulturalists, and vegetation managers representing the three major eco-regions of South Carolina (Mountains, Piedmont, and Coastal Plain) and were invited to recommend changes, including additions, deletions, or changes to current species ranking. The SC-EPPC List Committee compiled comments from the reviewers and established initial ranks for each species based upon reviewer input.

The ranking criteria used was adopted in 2011 and is based upon criteria from Tennesseee (which has been also been developed and used in other states including Massachusetts, California, Connecticut, and Virginia as well as NatureServe). Each plant was evaluated and its rank established using the ranking criteria. These are objective measures, based upon the invasive plants' effect on south Carolina's native plant communities and their status in the landscape as documented in the Early Detection and Distribution Mapping System or EDDMapS (http://www.eddmaps.org/) and in the S.C. Plant Atlas (http://cricket.biol.sc.edu/acmoore/scplantatlas.html), which is maintained by the University of South Carolina's A.C. Moore Herbarium and SC Department of Natural Resources' Heritage Trust Program. Professionals in adjacent states were also consulted for species where information was lacking within South Carolina.

The 2014 list was finalized in October 2014.

The SC-EPPC List Committee Chair is Sudie Daves Thomas, Wildlife Biologist, Natural Resources Conservation Service; the 2011 List Committee consisted of: Lisa Lord, Wildlife Biologist, The Nature Conservancy; Bert Pittman, Botanist, SC Department of Natural Resources Heritage Trust Program; Allan Bridgmon, Natural Resource Technician, SC Department of Natural Resources; and Kari Whitley, Scout Horticulture Consulting.

In 2014, the list was reviewed via email circulation: Reviewers were: Johnny Stowe StoweJ@dnr.sc.gov; brubakerj tds.net brubakerj@tds.net; (theresa_yednock@nps.gov); Wayne Grooms (waynemgrooms@gmail.com); Kari Whitley (gardenscout@gmail.com); Greg Yarrow GYARROW@clemson.edu; Rogers, Travis TWROGERS@dow.com; Anthony Savereno ASAVERE@clemson.edu; PAT LAYTON PLAYTON@exchange.clemson.edu; Bert Pittman PittmanB@dnr.sc.gov; Robin Mackie (rmackie@fs.fed.us); Lisa Lord lisa@openlandtrust.com; Janice H. Haldeman (haldeman@erskine.edu); joel.gramling@citadel.edu; John Nelson nelson@biol.sc.edu; Laura Rose (LROSE@clemson.edu); Bill Stringer (catboyz@nctv.com); Kathy Boyle (BoyleK@dnr.sc.gov); Stephen Compton SCOMPTO@clemson.edu; ddamrel@clemson.edu; Chris Marsh (cmarsh@lowcountryinstitute.org); Everett, Jean B

SC-EPPC Terrestrial Exotic Invasive Species List 2014

EverettJ@cofc.edu; Dr. Charles Horn (charles.horn@newberry.edu); David Bourgeois david.bourgeois@mwv.com; BROWN, HERRICK (brownh@biol.sc.edu); Helen Legare helenlegare@gmail.com; Eddie Bernard EBernard@tompsc.com (EBernard@tompsc.com); Randy G. Westbrooks <u>eintrstar.net</u>; Benjamin Powell (BPOWEL2@clemson.edu); Ll Gaddy llgaddy@bellsouth.net; Janie Marlow (webmaster@namethatplant.net); Jeff Jackson (lowcountryroots@aol.com); Bill Steele BillSteele@LeroySprings.com; Colette Degarady cdegarady@tnc.org; Dan Hill dhill@coker.edu; Daniel McMillan daniel.mcmillan@cpsagu.com; Jennifer Plunket jen@belle.baruch.sc.edu; Lauren Pile lpile@clemson.edu; Lauren Serra Lauren Serra@nps.gov; Laurie Reid lreid@forestry.state.sc.us; Mike Hook hookm@dnr.sc.gov, Patrick Mcmillan PMCMILL@clemson.edu, John Bodiford JBdfrd@clemson.edu, Bob P bplmsk@clemson.edu, Ryan Christopher Bean <rbean@clemson.edu>, Tom Brant JBRANT@clemson.edu , Jeffrey Fellers FELLERS@clemson.edu, William Heaton HEATON2@clemson.edu, Derrick M Phinney dphinne@clemson.edu, Jaime Pohlman JAIME@clemson.edu, Stephen Pohlman SPOHLMA@clemson.edu, Beth Richardson MRCHRDS@clemson.edu, Jack Whetstone JWHTSTN@clemson.edu, Skip Judson Van Bloem skipyb@clemson.edu, Michael Marshall MARSHA3@clemson.edu

A new category, "Alert," was added to the SC-EPPC list in 2011. It replaced the former Watch A and Watch B categories. These are species for which more information is needed to determine their invasiveness in the state. Some may not yet occur in South Carolina but are found in nearby states. These species have invasive characteristics such as rapid growth and high fruit/seed production and are known to be invasive in similar habitats to those found in South Carolina or are listed as a severe threat in adjacent states or pose substantial management difficulties where they occur. This category was added to provide a list of species to help prevent invasive plant introductions and assist in early detection and rapid response to new introductions. Another new category, "Emerging Treat" was adding in order to classify those species that are established in SC and known to be infesting natural areas, but information on management difficulties is lacking; or for widespread species that may be managed without great difficulties.

For consistency, nomenclature was taken from the Integrated Taxonomic Information System, ITIS, (http://www.itis.gov/) which is also used by Southeast EPPC and EDDMapS. For several recently changed scientific names, older names where retained in parentheses in the list for ease of recognition.

In 2011, the list title was changed from "Invasive Plant Pest Species in South Carolina" to the "SC-EPPC Terrestrial Exotic Invasive Plant Species List;" in order to be consistent with the mission of SC-EPPC. The list has always included species found in terrestrial natural habitats. Many of the listed plants may be found in wetlands and standing water, but are never free floating or submerged. Aquatic nuisance species have been omitted, not because they are not an important issue, but because a taskforce dedicated to addressing aquatic invasive pest plants is already in existence. This taskforce is called the "Aquatic Invasive Species Taskforce" and is supported by the SC Department of Natural Resources (http://www.dnr.sc.gov/invasiveweeds/ais.htm).

An exception was made in 2014 to include the exotic aquatic invasive plant: Crested Floating Heart (*Nymphoides cristata*). This species has not been listed as a state or federal noxious weed like most other problematic aquatic plants. Until this type of listing occurs, it will be included on the SC-EPPC pest plant list if it remains a threat to natural areas in SC.