

Working Group Timeline

Formal Meetings October 2021 - April 2023:

- 16 Planning Team Meetings
- 4 Survey Team Meetings
- 5 Technical Team Meetings
- 1 Ranking Workshop
- 3 Ecological Crosswalk Meetings
- 7 Grant proposal & administration meetings



NatureServe Conservation Ranks



[About the Data](#) [About Us](#) [Help](#) [Explore This](#) [Add a Species](#)

Parosia grandifolia

Targeted Grass of Parosia

[New Search](#)

GU

GX

GH

G1

G2

G3

G4

G5

Unrankable

Extinct

Historic

Imperiled

Vulnerable

Apparently Secure

Secure

State-Provincial Conservation Status

Documented Distribution

State-Provincial Conservation Status

Documented Distribution

Conservation

Scientific Name: *Parosia grandifolia* DC.

Other Common Name: Targeted grass of Parosia (TN)

Kingdom: Plantae

Phylum: Anthophyta

Class: Dicotyledonae

Order: Rosales

Family: Asteraceae

Genus: *Parosia*

Scientific Name Reference: Flora of North America Editorial Committee. 2004. Flora of North America North of Mexico, Vol. 22. Magnoliophyta: Vascular plants without tubular corolla. Oxford Univ. Press, New York. 909 + 491 pp.

Copyright Reference: Carson, J.T. 1993. A quantitative checklist of the vascular flora of the United States, Canada, and Greenland, 3rd edition. J.unk. Timber Press, Portland, OR.

Native Plant Society Reference: [Parosia grandifolia](#)

	Global	National	Subnational
Unrankable	GU	NU	SU
Extinct	GX	NX	SX
Historic	GH	NH	SH
Critically Imperiled	G1	N1	S1
Imperiled	G2	N2	S2
Vulnerable	G3	N3	S3
Apparently Secure	G4	N4	S4
Secure	G5	N5	S5



Method for application of SE Plants RSGCN Levels of Conservation Concern.

Global ranks and subnational rank criteria are described for each Level of Conservation Concern. Intraspecific (T) ranks are not listed but follow the same method outlined.

*Consideration of subnational ranks (srank(s)) only for states within the southeastern U.S. region.

<ul style="list-style-type: none"> GX, GH, G1, G1G2, G1?, G2, G2? 	Very High
<ul style="list-style-type: none"> G1G3, G2G3 Higher risk G3 and G3? with only S1, S2, SH, or SX* srank(s) 	High
<ul style="list-style-type: none"> Lower Risk G3 and G3? with SNR or rounded S3, S4* srank(s) G2G4, G3G4 Higher Risk G4, G4? and G3G5 with ≥ 5 rounded S1, S2, SH, or SX* srank(s) 	Moderate
<ul style="list-style-type: none"> Lower Risk G4, G4?, and G3G5 with ≤ 5 rounded S1, S2, SH, or SX* srank(s) G4G5, G5, G5?, GNA 	Low
<ul style="list-style-type: none"> GNR, GU 	Manual Review Needed

INVITATION FOR PARTICIPATION

SOUTHEASTERN PLANTS

REGIONAL SPECIES OF GREATEST CONSERVATION NEED

The Southeastern Plant Conservation Alliance (SE PCA) is requesting your expertise and involvement with the development of the nation's first RSGCN for plants.

Survey Team Tasks

- Review NatureServe preliminary taxa list and associated data.
- Share additional species-specific information about distribution, status, threats, and conservation needs.
- Inform decision-making by the Technical Team to spotlight species with decline, issues for collective action, and regional responsibility.



Resources

- Preliminary taxa list with screening methodology
- Survey Team instructions + FAQ
- RSGCN species assessment survey
- Sample Southeastern Animals RSGCN List

[Click here to access resources](#)

Please share this invitation with other plant conservationists with knowledge of imperiled Southeastern species:

- Natural heritage network/state agency botanists
- Federal agency biologists/botanists/ecologists
- State Plant Conservation Alliance coordinators
- Other botanical experts



Survey responses must be received by Monday, April 18, 2022







RSGCN Assessment Survey

(March - May)

State	# of Responses
Alabama	1
Florida	2
Georgia	5
Kentucky	3
Louisiana	1
Mississippi	2
Missouri	1
North Carolina	3
Oklahoma	2
South Carolina	2
Tennessee	4
Texas	1
West Virginia	3
Total	30

RSGCN Technical Review

(May - August)

- **Meeting 1** (May 9)
- **2 Q & A sessions** (June 16 & 24)
- **Meeting 2** (July 11)
 - ➔ Discussions to gain consensus on 130 species
- **Meetings 3 & 4** (August 15 & 22)
 - ➔ Final consensus meetings
 - ➔ Select species for Ranking
- **Feedback incorporated into list:**
 - Taxonomy updates (SE Flora)
 - Changes to level of concern
 - G-rank updates
 - S-rank updates

Table 1. Method for levels of conservation concern. *Consideration of subnational ranks (srnk(s)) only for states within the SE U.S.		Sum of Taxa by Group
GX, GH, G1 (incl. G1, G1G2, G1?), or G2 (incl. G2?) TX, TH, T1 (incl. T1, T1T2, T1?), or T2 (incl. T2?)	Very High	697
G2 (incl. only G1G3, G2G3) or G3 (incl. G3?) with only rounded S1, S2, SH, or SX* sranks T2 (incl. only T1T3, T2T3) or T3 (incl. T3?) with only rounded S1, S2, SH, or SX* sranks	High	251
G3 (incl. G3?) with SNR, or rounded S3, S4* or other rounded G3 (incl. G2G4, G3G4) or G4 (incl. G4?) w/ ≥5 states with rounded S1, S2, SH, or SX* sranks T3 (incl. T3?) with SNR, or rounded S3, S4* or other rounded T3 (incl. T2T4, T3T4) or T4 (incl. T4?) w/ ≥5 states with rounded S1, S2, SH, or SX* sranks	Moderate	876
G4 (incl. G3G5, G4?, G4G5), G5 (incl. G5?), or GNA T4 (incl. T3T5, T4?, T4T5), T5 (incl. G5?), or TNA	Low	6646
GNR, GU TNR, TU	Manual Review Needed	801
	Total	9271

>50% IDK	<50% Consensus	50/50 Responses
<i>Allium allegheniense</i>	<i>Actaea racemosa</i>	<i>Agalinis skinneriana</i>
<i>Arabis patens</i>	<i>Agalinis auriculata</i>	<i>Ageratina altissima</i> var. <i>roanensis</i>
<i>Calystegia catesbeiana</i>	<i>Carex decomposita</i>	<i>Allium oxyphilum</i>
<i>Chaerophyllum procumbens</i> var. <i>shortii</i>	<i>Carex misera</i>	<i>Amorpha schweinfurthii</i>
<i>Collinsonia serotina</i>	<i>Carex ruthii</i>	<i>Amphianthus pusillus</i>
<i>Euphorbia purpurea</i>	<i>Cayaponia quinqueloba</i>	<i>Andropogon arctatus</i>
	<i>Cheilanthes alabamensis</i>	<i>Anemone quinquefolia</i> var. <i>minima</i>
	<i>Cicuta maculata</i> var. <i>bolanderi</i>	<i>Aristida mohrii</i>
	<i>Dasistoma macrophylla</i>	<i>Aristida patula</i>
	<i>Eleocharis bifida</i>	<i>Arnoglossum diversifolium</i>
	<i>Gaylussacia brachycera</i>	<i>Asarum rosei</i>
		<i>Asimina obovata</i>
		<i>Asplenium heteroresiliens</i>
		<i>Astragalus obcordatus</i>
		<i>Astragalus tennesseensis</i>
		<i>Aureolaria patula</i>
		<i>Baptisia calycosa</i> var. <i>villosa</i>
		<i>Baptisia megacarpa</i>
		<i>Baptisia simplicifolia</i>
		<i>Bejaria racemosa</i>
		<i>Berlandiera subcaulis</i>
		<i>Bigelovia nuttallii</i>
		<i>Borodinia serotina</i>
		<i>Botrychium simplex</i> var. <i>simplex</i>
		<i>Calamovilfa curtisii</i>
		<i>Calystegia catesbeiana</i> ssp. <i>catesbeiana</i>
		<i>Cardamine clematidis</i>
		<i>Carex biltmoreana</i>
		<i>Carex lucorum</i> var. <i>austrolocorum</i>
		<i>Carex oxylepis</i> var. <i>pubescens</i>
		<i>Chamaecrista deeringiana</i>
		<i>Chelone obliqua</i> var. <i>erwiniae</i>
		<i>Chelone obliqua</i> var. <i>obliqua</i>
		<i>Chrysopsis floridana</i>
		<i>Chrysopsis godfreyi</i>
		<i>Cirsium horridulum</i> var. <i>vittatum</i>
		<i>Coreopsis latifolia</i>
		<i>Crataegus flava</i>
		<i>Crataegus mendosa</i>
		<i>Crataegus senta</i>
		<i>Cuscuta indecora</i> var. <i>indecora</i>
		<i>Delphinium exaltatum</i>
		<i>Dichanthelium cryptanthum</i>
		<i>Echinacea laevigata</i>
		<i>Eriochloa michauxii</i>
		<i>Eupatorium maritimum</i>
		<i>Galium arkansanum</i> var. <i>pubiflorum</i>
		<i>Garberia heterophylla</i>
		<i>Gentiana austromontana</i>
		<i>Gymnocarpium appalachianum</i>
		<i>Helenium virginicum</i>
		<i>Helianthemum nashii</i>
		<i>Heteranthera missouriensis</i>
		<i>Heuchera caroliniana</i>
		<i>Heuchera parviflora</i> var. <i>puberula</i>
		<i>Hexastylis sorriei</i>
		<i>Houstonia longifolia</i> var. <i>glabra</i>
		<i>Hymenocallis pygmaea</i>
		<i>Hypericum edisonianum</i>
		<i>Ilex opaca</i> var. <i>arenicola</i>
		<i>Juncus caesariensis</i>
		<i>Krigia montana</i>
		<i>Lesquerella ovalifolia</i> ssp. <i>alba</i>
		<i>Liatris virgata</i>
		<i>Lysimachia loomisii</i>
		<i>Macbridea caroliniana</i>
		<i>Malus angustifolia</i> var. <i>puberula</i>
		<i>Minuartia cumberlandensis</i>
		<i>Mirabilis exaltata</i>
		<i>Muhlenbergia glaberrima</i>
		<i>Nemastylis floridana</i>
		<i>Nolina greenii</i>
		<i>Nuphar lutea</i> ssp. <i>ulvacea</i>
		<i>Oenothera riparia</i>
		<i>Opuntia phaeacantha</i> var. <i>camanchica</i>
		<i>Packera serpenticola</i>
		<i>Parietaria praetermissa</i>
		<i>Paronychia erecta</i>
		<i>Parthenium auriculatum</i>
		<i>Penstemon smallii</i>
		<i>Persea humilis</i>
		<i>Phaseolus polystachios</i> var. <i>sinuatus</i>
		<i>Phlox buckleyi</i>
		<i>Physalis angustifolia</i>
		<i>Platanthera shriveri</i>
		<i>Poa paludigena</i>
		<i>Polygala lindheimeri</i> var. <i>parvifolia</i>
		<i>Potamogeton floridanus</i>
		<i>Rhynchospora cephalantha</i> var. <i>attenuata</i>
		<i>Ripariosida hermaphrodita</i>
		<i>Rubus trux</i>
		<i>Rubus whartoniae</i>
		<i>Sagittaria graminea</i> ssp. <i>weatheriana</i>
		<i>Sarracenia alabamensis</i>
		<i>Schizachyrium maritimum</i>
		<i>Schizachyrium stoloniferum</i>
		<i>Scutellaria altamaha</i>
		<i>Scutellaria arguta</i>
		<i>Scutellaria incana</i> var. <i>1</i>
		<i>Selaginella tortipila</i>
		<i>Silene virginica</i> var. <i>robusta</i>
		<i>Solidago simulans</i>
		<i>Spiranthes ovalis</i> var. <i>ovalis</i>
		<i>Stachys clingmanii</i>
		<i>Streptanthus squamiformis</i>
		<i>Symphyotrichum georgianum</i>
		<i>Symphyotrichum rhiannon</i>
		<i>Synandra hispidula</i>
		<i>Talinum mengesii</i>
		<i>Thelypodium wrightii</i> ssp. <i>oklahomense</i>
		<i>Thermopsis villosa</i>
		<i>Trillium pusillum</i> var. <i>virginianum</i>
		<i>Trillium vaseyi</i>

Technical Team Consensus Overview

- **High Response Priority (Meetings 2, 3, & 4)**
 - Species requiring consensus from Technical Team
 - >50% IDK (6)
 - <50% Consensus (11)
 - 50/50 Responses (113)
- **Moderate Response Priority**
 - One Response (292: 156 yes; 136 IDK)
 - **Planning Team assessment**
 - TCI, SEAFWA, SE Flora, NatureServe
 - Input & final approval from Technical Team
- **Species not in need of consensus**
 - Moderate Response Priority (150)
 - **Planning Team assessment**
 - TCI, SEAFWA, SE Flora, NatureServe
 - Final approval from Technical Team
 - Lowest Response Priority (9,142)

Highest Response Priority	>50% IDK	6
	50/50 Responses	11
	<50% Consensus	113
Moderate Response Priority	One Response	1014
	Yes, Higher	90
	Yes, Lower	66
	IDK	136
	No	722
	>50% Yes, Lower	9
	>50% Yes, Higher	1
	>50% No	140
Lowest Response Priority	100% Consensus	288
	No Responses	8854

RSGCN Ranking Workshop

Goals

- 1. Update Global and Subnational rankings**
 - Taxa prioritized during RSGCN assessment process
 - To clarify between Moderate & Low categories (on/ off list)
- 2. Assess at least 30 of the 50 species**
supported by the RSGCN project



Accomplishments

- 1. Assessed 71 species**
- 2. Ranked 20 species never before ranked**
- 3. Updated ranks led to the inclusion of additional species previously assigned "Low"**
 - **Hybrid participation from 13 states, 27 attendees**
 - 2 North American botanists (NatureServe)
 - 2 regional advisors (SE Flora & SEAFWA)
 - 7 states in-person; 6 states virtual; 2 additional states involved in preparation & follow-up
 - **Coordination of results includes all 15 states**



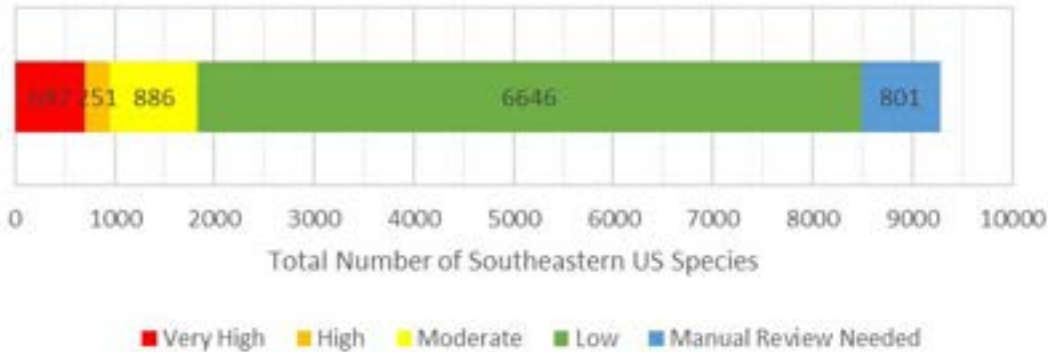
Southeastern Plants RSGCN List

9,271 total SE taxa assessed

- 1,824 taxa on RSGCN list (19.7%)
 - 697 Very High (7.52%)
 - 251 High (2.71%)
 - 876 Moderate (9.4%)
- 6,646 Low (71.7%)
- 801 Manual Review Needed (8.64%)



Number of Species by Level of Conservation Concern



Additional criteria (sub-categories):

- **Taxonomic families**
- **Species and habitat threats**
- **Conservation & research needs**
- Ecological system groupings (USNVC)
- Taxa in need of ranking updates
- ESA listed and at-risk species (FWS)
- Medicinal and other economic taxa
- Culturally significant species

Very High



Dionaea muscipula
Venus flytrap

High



Sarracenia jonesii
Jones' pitcherplant

Moderate



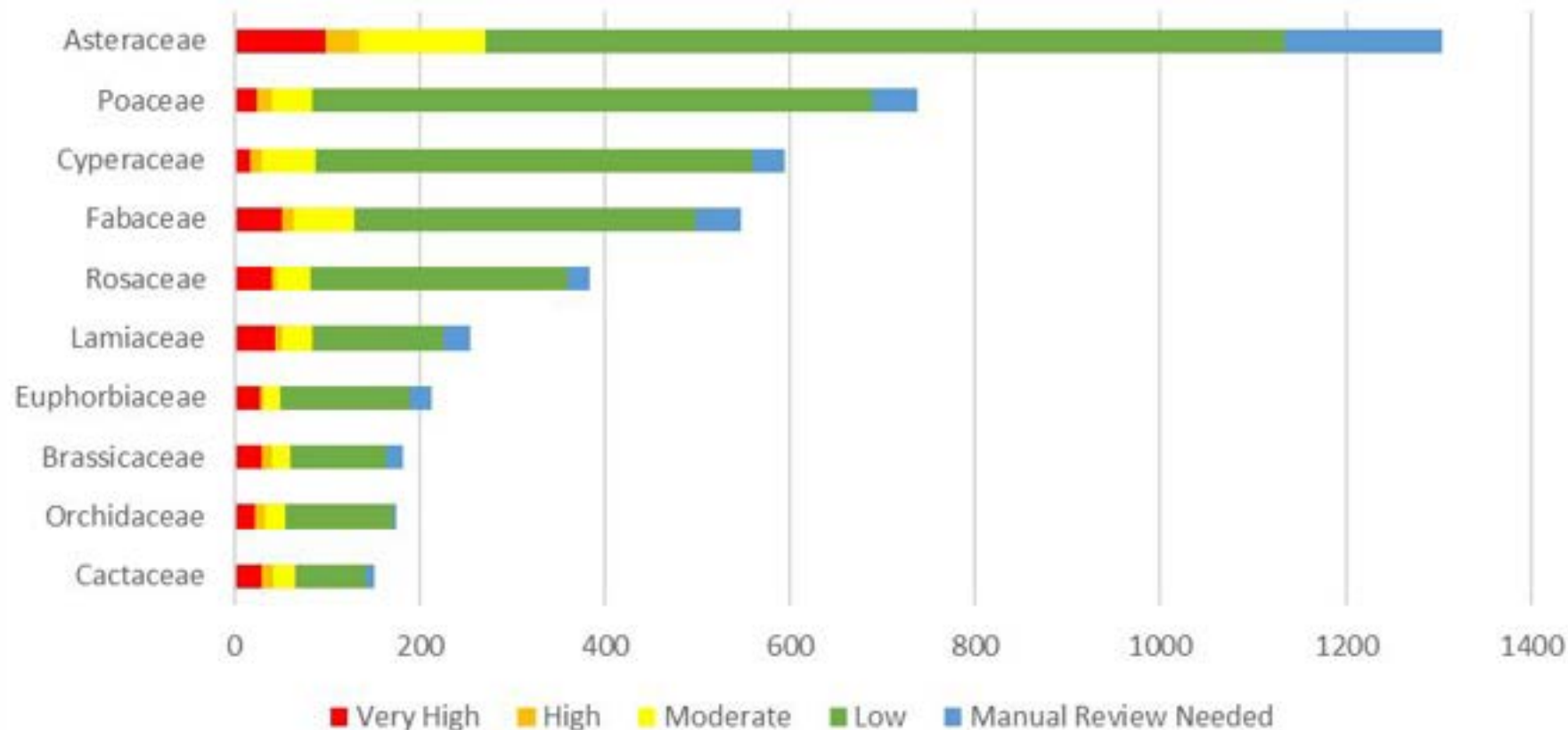
Panax quinquefolius
American ginseng

Low

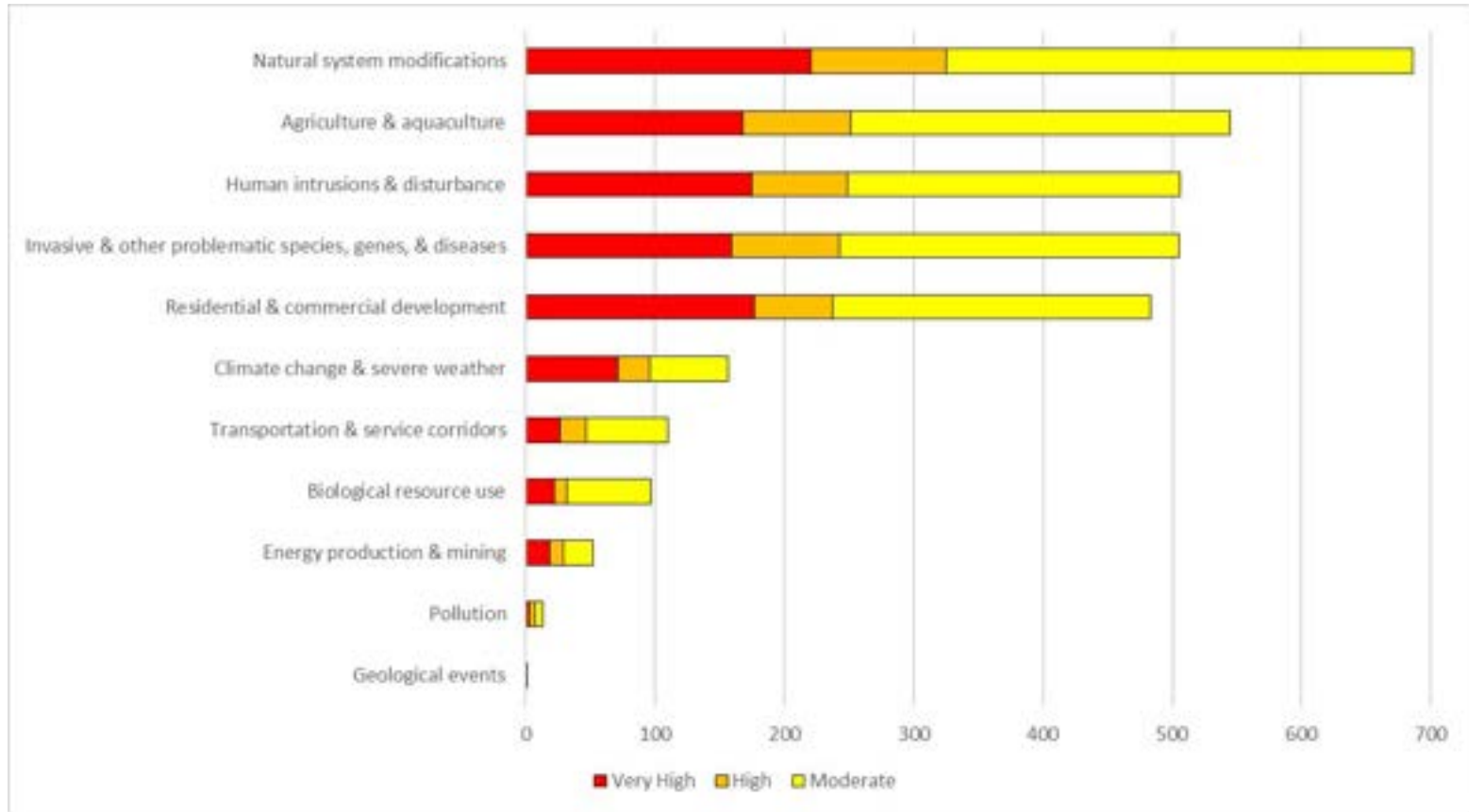


Arundinaria gigantea
Rivercane

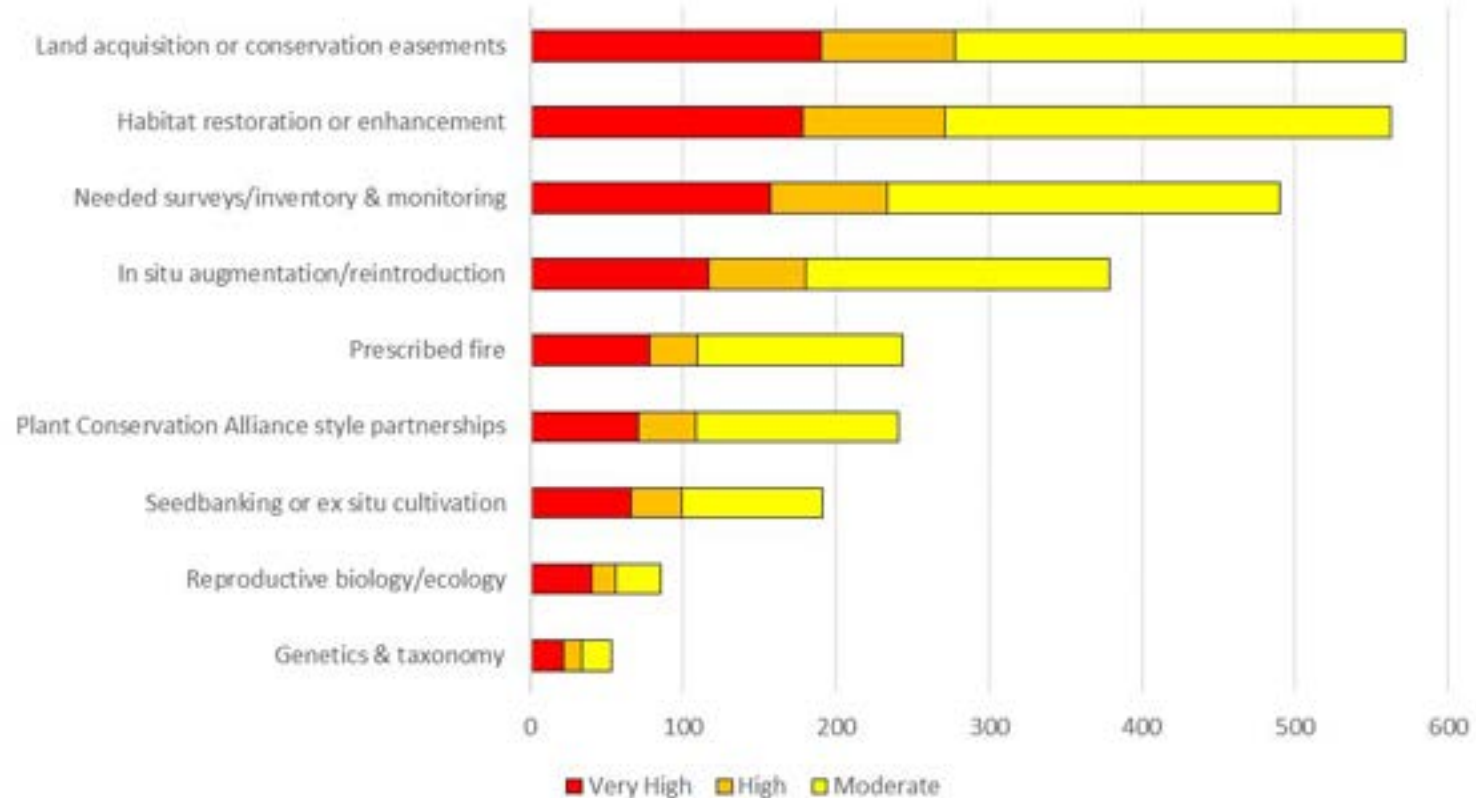
Levels of Conservation Concern for Top 10 Families



Southeastern Plants RSGCN - High Level Threats



Southeastern Plants RSGCN - Needed Conservation Actions



Southeastern Plants RSGCN Next Steps

In Progress

- **List shared with Technical Team representatives for review** *(March)*
- **List submitted to the SEAFWA Wildlife Diversity Committee for review** *(April)*
- **RSGCN list available at www.se-pca.org** *(Updated version available by June)*
- **SE Flora finalizing crosswalk of RSGCN ecological associations to the US NVC** *(Groups & Alliances, to be added in May)*
- **Report content undergoing final edits** *(design process May - June, July release)*
- **ORISE Postdoctoral fellow project collating available climate model info** *(Calendar year 2023)*

Seeking Funding

- Inform Species Status Assessments to support U.S. Fish & Wildlife Service Listing Workplan
- Conduct additional Conservation Assessments and Rank updates with the NatureServe network
- Continue crosswalking to finer NVC levels for all species (Alliance & Community Associations)
- Inform the enhancement of data availability and prioritization of species for Puerto Rico & U.S. VI
- Revise list to incorporate data updates, including State SGCNs (5 yrs.) & PR & U.S. VI (10 yrs)
- Support the review and development of a strategy for the conservation of culturally significant, economic, medicinal species
- Address non-vascular taxa?

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Climate impacts on rare-plant biodiversity in the southeastern U.S.



Challenge A new regional list has been developed of Southeastern Plant Species of Greatest Conservation Need. How will climate change impact habitat and management considerations for these species?



Results

This project will produce user-friendly climate-impact summaries for subsets of plant species from the new regional SGCN list. Potential climate impacts will be assessed both for species and for ecosystems using downscaled climate projections and existing ecosystem information.



Impact

Anticipating potential climate impacts to rare plants and their habitats can aid botanical research and conservation efforts and may help inform state-level planning and rare-species monitoring.



Image Credit: Brittany Salmons



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Partners

SE Plant Conservation Alliance,
Atlanta Botanical Garden,
NatureServe



Link

<https://secasc.ncsu.edu/science/rare-plants/>

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Additional Outcomes of SE Plants RSGCN



- List species and habitats with regional responsibility and opportunities for collaboration
- Enhance data consistency and updates
- Support State Wildlife Action Plan revision
- Inform project proposals demonstrating our needs
- Promote awareness & capacity for conserving plants
- Southeast serves as a model & leader



Flora of the
Southeastern United States

Edition of April 24, 2022



SEAFWA
Southeastern Association of
Fish and Wildlife Agencies



Our Voices are Needed: Recovering America's Wildlife Act

- Unless we enact change, 1,000,000 plant and animal species will face extinction.
- Our ability to preserve the biodiversity of plants underlies our continued existence.
- Our networks can serve as leaders.
- This is achieved by demonstrating that plant conservation is a crucial asset.
- Plants support all lifeforms, as well as our own well-being, and are indispensable.



CENTER FOR PLANT CONSERVATION



Recovering America's Wildlife Act



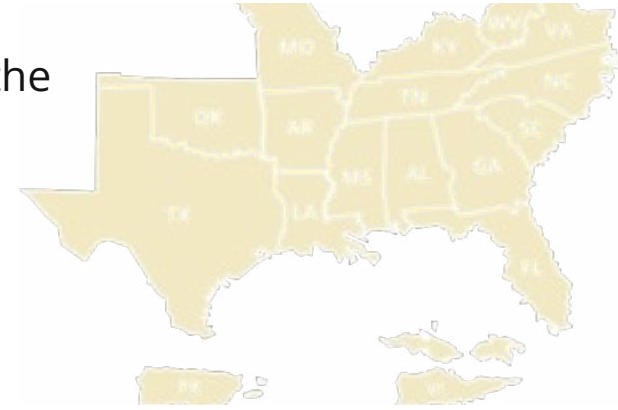
Contact your Senator now!

- **RAWA** would be a significant investment in wildlife conservation to states & tribes.
 - Provide state and territorial agencies with up to \$1.4B annually to implement Plans
 - Invest up to \$98M annually in the wildlife conservation efforts led by Tribal Nations
 - Support state, tribal, private, and national efforts to recover wildlife identified as threatened or endangered
 - Classify PLANTS as Wildlife and provide \$ incentives for their inclusion in SWAPs
- **RAWA** was reintroduced by the Senate - Our goal is for bill passage in May to move it to the House of Representatives.



2023 - Upcoming Public Events

- **May 10th** - The SE PCA & SE Plants RSGCN presentation to the National PCA during their bi-monthly meeting
- **May 16th** - SE Plants RSGCN presentation to the Southeast Climate Adaptation Center (SECASC) SWAP Working Group
- **July 10th** - NatureServe Ranking workshop presentation to the SE PCA general membership (bi-monthly meeting)
- **July 22nd** - SE Plants RSGCN presentation to the Natural Areas Association webinar series
- **September 11th** - Improving Recovery Outcomes through the SE PCA - Premier of documentaries featuring partners' efforts to conserve habitats & focal species (bi-monthly meeting)
- **November 8th** - Improving Recovery Outcomes through the SE PCA - Pilot Project presentations (bi-monthly meeting)



Partnership Acknowledgements



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SEAFWA
Southeastern Association of
Fish and Wildlife Agencies



SAVE • THE • DATE

Southeastern Plant Conservation Alliance

SePPCon 2024

OCTOBER 14 - 18

Southeastern Center for Conservation



ATLANTA BOTANICAL GARDEN

Thank you!

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