



National Leadership Grants - Museums

Sample Application MG-260363-OMS-26
Project Category: Community Engagement
Project Type: Research

Center for Plant Conservation

Amount awarded by IMLS:	\$479,120
Amount of cost share:	\$0

The Center for Plant Conservation will develop a national framework for reconciling plant taxonomy. Although plant names are foundational to research, conservation, collections management, land stewardship, regulation, and public communication, the United States currently lacks a single, broadly accepted checklist that integrates differing taxonomic opinions in a consistent and publicly accessible way. The Center for Plant Conservation will partner with botanical and biodiversity data organizations to establish and test a replicable process for building consensus taxonomy. The project will produce annual checklist releases for the vascular plants of the United States, create a permanent public archive of proposals, discussions, voting outcomes, and decision rationales, and generate a methodological model for how biodiversity communities can govern contested scientific information in an open, durable, and scalable way. As a result, federal and state agencies, herbaria, botanic gardens, conservation organizations, researchers, and educators will have access to reliable and consistent scientific resources that inform plant conservation.

Attached are the following components excerpted from the original application.

- Narrative
- Schedule of Completion
- Digital Products Plan
- Public Access Plan

When preparing an application for the next deadline, be sure to follow the instructions in the most recent Notice of Funding Opportunity for the grant program to which you are applying.

Consensus Plant Checklist of the United States

Project Justification

Herbaria, botanical gardens, living collections, seed collections, and other museum- and conservation-based plant collections are foundational infrastructure for understanding plant species, ecosystem change, and conservation priorities. Together, these resources support scientific research, species recovery, land management, environmental review, land use planning, and public policy. Yet a major barrier limits their curation: there is no standardized, transparent process for developing and maintaining a consensus list of accepted plant taxa for the United States. Curators and taxonomists working on the same plants at different organizations annotate their collections according to different taxonomic standards and often struggle to determine which standard to use. Application of these valuable collections is hindered by mismatches in taxonomy, making conservation decision-making across broad scales much more challenging and susceptible to error.

When authoritative floras and taxonomic databases disagree about which species are recognized, conservation planning becomes inconsistent and, at times, controversial. Agencies and practitioners may prioritize taxa that later prove not to warrant recognition, or fail to act on taxa that do. This problem creates inefficiency, uncertainty, and uneven conservation outcomes (Meyer et al. 2026). Taxonomic discrepancies can be substantial among regional and continental treatments, leaving agencies and conservation practitioners making decisions with uncertain or conflicting taxonomic information. We estimate that 40% of the flora of the United States is treated differently among the major taxonomic sources.

The understanding of species taxonomy of a region (such as the United States) or the world evolves through time, and like all science is sometimes “messy” in arriving at consensus and authoritative conclusions. New proposals can take time to achieve consensus. Experts can support alternative taxonomic schemes. Garnett & Christidis (2017) asserted that “taxonomy anarchy hampers conservation” and proposed to “restrict the freedom of taxonomic action” through governing subcommittees that would “review taxonomic papers for compliance” (Thomson et al. 2018). We emphatically reject this solution, while acknowledging that lack of consensus checklists (and associated conservation ranking and georeferenced locality data) is indeed a major impediment to the efficiency and effectiveness of not only conservation but also science, land use planning, and public policy. Our proposal aims to create a system that facilitates developing critical and regularly revised taxonomic consensus (and information) that can support societal uses of taxonomy “downstream” from an unhampered and robust scientific process of taxonomic research. This will create a standard that can be adopted broadly for the United States, avoiding the redundant and inefficient development of multiple competing checklists by different agencies, organizations and scientists. It will also result in creating an accurate US standard that can translate to global checklists, rather than the current system of having global systems impose a standard to the US – that is often not well-informed about US knowledge and understanding.

Mismatches in taxonomy create practical burdens for museums, herbaria, conservation programs, scientists, and public agencies – all of whom depend on taxonomic consistency to connect

specimen data, occurrence records, legal status, and conservation action. Experts often re-annotate specimens to a modern taxonomic name, but if their taxonomic schemes are not aligned, the collection will have a mess of names, some of which match but mean different things, or have different names for the same species concept. A consensus, well-documented taxonomic backbone would reduce reconciliation burdens across platforms and improve interoperability among museum collections, floristic databases, and conservation systems.

This project will develop and test a transparent, repeatable methodology for producing and maintaining a Consensus Plant Checklist of the United States, a documented taxonomic backbone designed for broad use across herbaria, botanical gardens, conservation organizations, and public agencies. The project will synthesize taxonomic literature and major floristic data sources into a versioned pre-consensus checklist, create tools to visualize competing taxonomic treatments, and implement a public, structured process for expert review and consensus decision-making. The result will be both a practical checklist and a transferable governance and technical method that can be adapted for other regions and other organismal groups.

This work aligns primarily with the IMLS National Leadership Grants for Museums Goal 2, Objective 2.1, by developing and testing an innovative, partnership-based method for addressing a widespread challenge across the natural history and museum collections field: reconciling taxonomic disagreement across authoritative sources in a transparent and reproducible way. The project is not only a checklist-building effort, it is also a methods-development project for governance, evidence review, and decision-making that can be reused beyond this specific flora.

Despite the clear need for a unified national plant checklist, the field still lacks a tested, transparent, and transferable model for reconciling taxonomic disagreement at national scale. Existing taxonomic resources provide critical content, but they do not supply a broadly accepted governance framework for resolving conflict, documenting rationale, and maintaining consensus through time. This project addresses that gap by treating consensus-building itself as a research problem: how can a public, evidence-based governance process produce a nationally useful checklist while preserving scientific transparency, reproducibility, and openness to future revision.

The project's theory of change is that a structured pre-consensus synthesis, paired with transparent expert review, documented decision-making, and versioned public releases, will reduce taxonomic reconciliation burden, improve interoperability across collections and conservation datasets, increase confidence in taxonomic decisions, and provide a model that can be adapted by other biodiversity data communities. By documenting both process and outcomes, the project will generate evidence about how contested scientific information can be governed in ways that are useful, durable, and broadly adoptable.

The bird community provides an instructive model for how expert leadership and transparent consensus processes can produce widely used taxonomic standards. In North and Middle America, the American Ornithological Society (AOS, formerly the American Ornithologists' Union) maintains the AOS Checklist through a standing classification committee and regular public supplements, and the current online checklist reports 2,212 species for its region. At the international level, the International Ornithologists' Union (IOU), through its Working Group on Avian Checklists and related global checklist efforts, has helped convene expertise to produce and maintain an open-access global bird checklist intended as a benchmark reference; recent

unified global efforts (AviList) recognize roughly 11,131 bird species worldwide. These examples demonstrate that convening expertise around transparent governance can establish a trusted baseline for species accounting and conservation use. The proposed Consensus Plant Checklist of the United States extends this same principle to a much larger and more complex taxonomic scope, on the order of approximately 25,000 plant species in the United States across more than 250 plant families. The checklist will require the development of scalable governance, documentation, and decision workflows. The Consensus Plant Checklist will inform global checklists and products such as the World Flora Online (WFO) and Plants of the World Online (POWO), thereby providing the United States with authority over which plants are recognized.

This project is also timely. Foundational pre-consensus work has already begun through prior support and collaboration, and a substantial portion of the pre-consensus synthesis has been initiated. The project can therefore move beyond concept development and into implementation, testing, state-level distribution harmonization (from NatureServe, FSUS, USDA Plants, and regional floras), and dissemination at a moment when collection curators and conservation agencies urgently need a shared taxonomic backbone.

The national leadership significance of this project lies not only in producing a consensus plant checklist for the United States, but in developing and testing a governance, transparency, and versioning model that can be adapted by other taxonomic and collections-based communities. The project therefore addresses an immediate national need in plant biodiversity infrastructure while also generating a replicable approach for managing contested scientific information across the broader museum, herbarium, and biodiversity data fields.

Research Questions

This project is both a research and methods-development effort. The central research questions are:

1. What are the plants that occur as native or naturalized in the United States? Which taxa can we confidently recognize as supported by modern taxonomic research?
2. What are the relationships of the taxa in the consensus checklist to taxonomic concepts in other regional and national floras and checklists?
3. What is the state-level distribution for each of the approximately 25,000 plant taxa?
4. What transparent, repeatable methodology can be used to develop and maintain a consensus plant checklist for the United States across multiple authoritative but conflicting taxonomic sources?
5. How effectively can a pre-consensus synthesis and interactive visualization system reduce ambiguity and improve stakeholder evaluation of competing taxonomic treatments?
6. What governance and decision process produces the most broadly acceptable and well-documented consensus outcomes among taxonomic experts and data users?
7. How transferable is the resulting methodology to other regions and, potentially, other organismal groups?
8. To what extent does the governance process reduce taxonomic ambiguity and reconciliation burden for institutional users?
9. How usable and trustworthy do participating experts and end users find the resulting checklist and decision framework?

10. Which elements of the governance, documentation, and release model are most transferable to other taxonomic or collections-based communities?

Project Work Plan

Project period: September 1, 2026, to August 31, 2029.

The project will proceed in three phases that integrate data harmonization, community governance, consensus decision-making, and dissemination. The work builds on source datasets and floristic treatments commonly used in the US, including NatureServe, USDA PLANTS, Flora of North America, the Integrated Taxonomic Information System (ITIS), Tropicos, Jepson eFlora, Flora of the Southeastern United States, and other state and regional floras (including Alaska, Hawaii, Colorado, and the Pacific Northwest). The project also includes work on monographs and genetic research papers that continuously update taxonomic insights.

The project will use a mixed-methods research design. First, major taxonomic sources will be synthesized to identify areas of agreement, disagreement, and uncertainty. Second, selected taxonomic conflicts will move through a structured governance process in which experts review evidence, deliberate publicly, and record decisions and rationales. Third, the project will evaluate transparency, usability, adoption, and perceived trustworthiness through surveys, interviews, and structured feedback from participating institutions and end users. Fourth, implementation metrics, such as proposal throughput, decision latency, checklist use, and reported reconciliation burden, will be tracked across the project period. Together, these activities will allow the project team to evaluate both the effectiveness of the consensus process and its broader applicability. Pilot and evaluation participants will include herbaria, botanical gardens, conservation organizations, and biodiversity data users whose workflows depend on stable and interpretable plant nomenclature.

Governance Structure for Taxonomic Proposals and Decisions (adapted from the PPG model)

The Consensus Plant Checklist of the United States will use a public governance model informed by the Pteridophyte Phylogeny Group (PPG), adapted for the larger scale and broader scope of this project. PPG provides a working example of community-based taxonomic proposal review and implementation using GitHub, including public issue-based discussion, regular voting cycles, and implementation thresholds.

This project will adapt the PPG model to the scale of the United States vascular flora and to the wider stakeholder community needed for a national plant checklist. Stakeholders may differ between taxonomic groups as experts about sedges may have little to say about ferns, for example. Key process elements will include:

- **Definition of groups and timelines:** We will define groups of related plant families (e.g., ferns and gymnosperms, Fabaceae, lilies and orchids) and the timeline for each to undergo the next steps as a group. Each group will comprise hundreds to thousands of taxa.

- **Pre-consensus checklist:** We will research existing floras and literature to synthesize an initial proposal for consensus that includes relationships between the pre-consensus taxa and other major floras. The pre-consensus checklist is necessary to identify areas of agreement and disagreement across sources and to make candidate alternatives visible to participants. Alternatives would otherwise neither be known nor be accessible (scattered across journals), and the explicit relationships between different taxonomic treatments would not be known.
- **Public proposal intake:** Alternate taxonomic treatments will be submitted through a standardized template on a public platform (GitHub or an equivalent system). Each proposal will document the taxonomic question, relevant literature, affected taxa, alternative treatments, and implications for synonymy and distributions, offering alternatives to the pre-consensus checklist at the same level of detail.
- **Interactive visualization tools:** We will create tools to compare and contrast taxonomic options visually. These will build on existing text-based and tabular taxonomic comparisons, but allow for users to select a scope (e.g., a family, genus, or set of species) for visualization and then further hide certain elements and highlight concepts and relationships.
- **Public discussion and evidence review:** Proposals will be discussed in public issue threads or an equivalent forum (e.g., GitHub). Taxonomists, herbarium curators, conservation practitioners, and data managers will be able to comment, provide evidence, and clarify implications. AI will be used to help users summarize long and complex discussions in order to help them understand the key issues and whether they want to weigh in further.
- **Defined review windows and voting cycles:** Proposals will move through clearly defined timelines, with regular voting cycles (generally monthly or bi-monthly, see the Schedule of Completion for details).
- **Structured voting and implementation:** The project will test voting or a comparable structured approach for proposals with multiple defensible alternatives. Decision thresholds and implementation rules will be documented and piloted. Ranked-choice voting will help identify alternate treatments that have significant support but are not yet part of the consensus.
- **Formation of the Consensus Plant Checklist Committee:** the governing and voting body responsible for reviewing and voting on proposals.
- **Transparent reporting of results:** We will clearly and transparently report voting results, including proposal status, level of support, implementation outcome, and rationale. This will create a durable public record of taxonomic decision-making and allow users to identify areas of high taxonomic debate.
- **Archived decision history and annual snapshots:** Proposal text, discussion, vote summaries, and implementation notes will be archived and linked to versioned checklist releases. Annual checklist snapshots will be preserved online so prior versions remain citable and accessible.

An important outcome of this transparency is research prioritization. By clearly documenting where disagreement persists, where votes are close or alternatives receive significant support, and where conservation consequences are substantial, the project will help identify high-value topics for future taxonomic research, including master's degree and PhD projects. This will also strengthen training pipelines in systematics and conservation science by linking unresolved taxonomic questions to practical conservation and collections-use needs.

Phase 1 (Year 1): Data acquisition, pre-consensus synthesis, beginning of consensus building

This phase will continue pre-consensus synthesis research as the foundation for discussion and decisions. The first summaries of taxonomic treatments, alternatives, and voting will take place in the months following the completion of pre-consensus checklist groups. All family and taxa counts below are approximations.

Activities

- Hold an in-person meeting of Committee members to formalize governance, process, and begin forming consensus.
- Complete source acquisition and metadata documentation for selected floristic and taxonomic resources.
- Develop and refine taxonomic crosswalks among source systems.
- Finalize pre-consensus research for 141 plant families (10,000 taxa from FNA volumes 2-10 and 12).
- Build and test interactive visualization tools to help users compare alternate taxonomic treatments and understand their implications.
- Launch the public proposal/discussion platform (GitHub or equivalent).
- Implement proposal templates and documentation standards.
- Pilot proposal review, decision-making, and final checklist for 100 plant families (5,000 taxa).

Year 1 Deliverables

- Governance and proposal-review protocol (v1)
- Data source inventory and metadata documentation
- Versioned pre-consensus checklist for 141 plant families
- Interactive visualization prototype for comparing taxonomic treatments
- Initial set of review-ready conflict summaries and proposal packets covering 141 plant families
- Initial partial checklist as CSV, and PDF files for 100 plant families (5,000 taxa)

Phase 2 (Year 2): Public proposal review, governance testing, and continued consensus decision-making

This phase will continue testing and implementing the public governance model and decision process for selected taxonomic groups, proceeding by family/taxonomic group and publishing voting results and a consensus checklist for additional plant families.

Activities

- Evaluate the voting process and options (or a comparable alternative) and their usability, transparency, and perceived fairness.
- Use AI-assisted summaries as an optional support tool for long discussions while preserving human expert judgment as the basis for decisions.
- Finalize pre-consensus research across 120 additional plant families (10,000 taxa from FNA volumes 11 and 13-22).
- Publish an annual versioned checklist release in PDF and CSV formats.

- Expand proposal review, decision-making, and final checklist for 124 plant families (12,000 taxa, FNA volumes 8-18).
- Publish clear vote summaries and decision outcomes for pilot groups.

Year 2 Deliverables

- Public proposal platform with archived discussions
- Consensus checklist for 124 plant families
- Voting protocol and implementation rules (v2)
- Interim versioned release of the Consensus Plant Checklist of the United States (12,000 taxa, FNA volumes 2-14)
- Interim checklist as searchable online website
- Interim checklist as CSV, and PDF files
- Public vote summaries and decision records for completed proposals

Phase 3 (Year 3): Scaling, completed checklist publication, evaluation, and transferability guidance

This phase scales the process to the remaining plant groups, formalizes the first complete annual publication, and evaluates adoption and impact across partner organizations.

Activities

- Finalize pre-consensus research for the last 13 plant families (4,000 taxa from FNA volumes 23-26).
- Expand proposal review, decision-making, and final checklist for remaining 40 families (7,000 taxa, FNA volumes 19-26).
- Publish an annual versioned checklist release in PDF and CSV formats.
- Maintain a searchable online interface for current and archived prior versions.
- Collect partner feedback on usability, interoperability, and adoption.
- Produce a methodology and governance guide documenting lessons learned and adaptation pathways for other regions or taxa.

Year 3 Deliverables

- Consensus Plant Checklist of the United States (v1.0 annual release, archived, all 270 plant families and 25,000 taxa)
- Consensus Plant Checklist version 1.0 as searchable online website
- Consensus Plant Checklist version 1.0 as CSV and PDF files
- Evaluation report (process, outputs, outcomes, and governance findings)
- Transferability guide for reuse by other collections-based communities

The project recognizes that taxonomic disagreement cannot always be fully resolved on a fixed timeline. To mitigate this risk, the governance model is designed to document unresolved questions transparently, preserve minority views where appropriate, and support annual versioning so that the checklist can continue to improve without requiring artificial consensus. Additional risks, including uneven participation across taxonomic groups and technical implementation challenges, will be managed through phased testing, documented workflows, and regular review by project leadership and advisory participants.

Evaluation Plan

The project will include a formal evaluation plan focused on both products and methods.

Process Evaluation

- Were governance protocols finalized and implemented on schedule?
- Were proposal cycles conducted as planned?
- Can areas of efficiency gains be identified?
- Did participation include the intended mix of taxonomists, curators, conservation practitioners, and data managers?
- Number of governance protocols finalized on schedule
- Number of proposal cycles completed
- Participation levels by stakeholder type
- Average time from proposal submission to decision

Output Evaluation

- Were versioned checklist releases produced on schedule?
- Were proposal records, vote summaries, and decision rationales archived and accessible?
- Were digital products (PDF, CSV, searchable interface) delivered and usable?
- Number of annual checklist releases published
- Number of archived snapshots posted
- Number and proportion of proposals with public rationale
- Number of metadata and governance documents posted publicly

Outcome Evaluation

- Did partner organizations report reduced taxonomic reconciliation burden?
- Did partners test or adopt the checklist as a taxonomic backbone?
- Did the project improve consistency in name use and synonymy mapping across systems?
- Number of institutions testing or adopting the checklist
- Reported reduction in staff time spent reconciling taxonomy
- Survey-based measures of usability and trust
- Website usage and download counts

Method Evaluation

- Was the adapted PPG-inspired governance process perceived as transparent, fair, and reproducible?
- Did public reporting of votes and rationales improve trust, usability, and research prioritization?
- Which elements of the governance model were judged most transferable?
- Can the approach scale across major taxonomic groups?
- Feedback from users on applicability beyond the project

Data sources for evaluation will include participation records, proposal counts, voting rates, timeline completion, platform analytics, and partner feedback surveys and interviews.

Project Results

The principal result of this project will be a transparent, versioned Consensus Plant Checklist of the United States, together with a tested governance and technical methodology for maintaining it over time. This strengthens the distinction between outputs and outcomes while preserving the proposal's emphasis on practical use by herbaria, agencies, and conservation organizations.

Outputs are the tangible products of the project, including versioned checklist releases, machine-readable downloadable files, a searchable public interface, metadata and governance documentation, a public archive of proposals and rationales, and peer-reviewed publications. Outcomes are the changes expected from use of these products, including improved interoperability, reduced taxonomic reconciliation burden, increased confidence in taxonomic decisions, and a transferable model for consensus-building in biodiversity data systems.

Outputs

- Consensus Plant Checklist of the United States (versioned): annual releases in PDF and CSV formats, archived annual snapshots for citation and reproducibility, ongoing updates to a current checklist between annual releases, and free public access through a searchable website and downloadable machine-readable files, and will be public domain (CC0).
- Public taxonomic proposal and decision archive: proposal templates and submission records, public discussion threads, clearly and transparently reported voting results, vote summaries, implementation decisions and rationales, and documentation of unresolved proposals and areas of continued disagreement.
- Digital access tools: searchable online website for checklist use and visualization tools for comparing alternate taxonomic treatments and proposal impacts.
- Reusable methodology: governance rules and voting protocols adapted for national-scale plant checklist work, technical workflow for pre-consensus synthesis and checklist maintenance, and guidance for adaptation to other regions and taxa.
- Open Access publication documenting the method used for taxonomic reconciliation, governance, voting, and project description.

Short-Term Outcomes

- Reduced taxonomic reconciliation burden for federal and state agencies, herbaria, botanical gardens, and conservation organizations that currently spend substantial time resolving taxonomy before acting.
- Improved consistency across platforms by providing a shared, documented taxonomic backbone.
- Greater transparency in areas of disagreement, making uncertainty visible rather than hidden.
- Better prioritization of future taxonomic research by identifying areas with high debate and high conservation impact.
- A clearer pipeline for graduate research, including master's and PhD projects, focused on unresolved taxonomic questions with practical implications for conservation and collections use.

Long-Term Outcomes

- More efficient and defensible conservation prioritization and policy implementation involving plants in the United States.

- Stronger interoperability among museum collections, plant sciences data platforms, and conservation applications.
- A sustainable, annually maintained taxonomic reference for plant data users.
- A transferable governance and workflow model for consensus taxonomy in other regions and, potentially, other organismal groups.

Success Indicators

- Number of source datasets ingested and documented
- Proportion of the target flora covered by pre-consensus synthesis
- Number of proposals submitted, reviewed, and resolved
- Number and proportion of proposals with publicly reported vote results and rationales
- Participation levels across institutions and stakeholder types
- Number of annual checklist releases and archived versions published
- Number of partner organizations testing or adopting the checklist
- User access and download metrics for digital products
- Number of unresolved high-impact taxonomic questions documented for future research prioritization

Management Outcomes

The development and maintenance of the Consensus Plant Checklist of the United States will require broad participation across taxonomic expertise, institutional roles, and conservation practice. By using a public, documented proposal-and-discussion model adapted from PPG for the larger scale and scope of this project, the checklist process will preserve expert reasoning, widen access to scientific debate, and create a durable record that supports both current decisions and future scholarship.

References

For the bibliography of literature cited, please see Supporting Document 2.

Schedule of Completion

Yellow, orange, & blue colors show each set of families moving through the project process

YEAR 1

[illegible]

Schedule of Completion

Yellow, orange, & blue colors show each set of families moving through the project process

YEAR 2

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
Create visualization tools, evaluate, revise						x						x
Finalize preconsensus checklist for families (FNA volumes)	11	11	13,14	13,14	15,16	17,18			19,20	19,20	21,22	
Publish results with visualization tools and forum for feedback (FNA volumes)			11		13,14	15,16	17,18				19,20	21,22
Gather feedback and establish voting procedure and timeline (FNA volumes)	10,12	10,12		11		13,14	15,16	17,18				19,20
Final vote, tabulation, and publication of checklist for set (FNA volumes)	8,9		10,12		11		13,14	15,16	17,18			
Update current checklist to reflect latest vote results (csv, pdf, web)	x		x		x		x	x	x			
Formal publication of annual list (csv, pdf, and web)								x				

Schedule of Completion

Yellow, orange, & blue colors show each set of families moving through the project process

YEAR 3

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Digital Products Plan

Type

We will create and maintain three types of digital products in this project.

First, document versions of the Consensus Plant Checklist of the United States will be published and available **annually** in both **PDF** and **CSV (comma-separated values) file formats** to ensure interoperability of the data across any platform in accessible formats. Metadata for these files will document the meaning of the columns (e.g., scientific name, taxonomic rank, relationship between plant names, reference) and terms used (taxonomic ranks, relationships).

Second, a **searchable website documenting the Consensus Plant Checklist** will be created within the existing flora framework in the Flora of the Southeastern United States (FSUS, fsus.ncbg.unc.edu) website. This existing website has been developed by our partner organization for the express purpose of searching, displaying, and downloading plant information, and to support many versions of floras simultaneously. Using this existing resource greatly reduces the time and cost of implementing a web interface for the Consensus Plant Checklist. FSUS uses the PHP scripting language built on a MySQL database, housed locally at our partner's university computing hub.

The third digital product will be the **discussion around points of taxonomic disagreement and voting results** that determined the Consensus Plant Checklist. These will be saved in an online forum (potentially GitHub) in a manner that retains insights and opinions for future use, consideration, and prioritization of research.

Availability

The document versions of the Consensus Plant Checklist (along with their metadata) will be posted and made freely available at our partner websites, including the Flora of the Southeastern United States (fsus.ncbg.unc.edu), the Center for Plant Conservation (saveplants.org), and NatureServe (natureserve.org). We will distribute and promote the Consensus Plant Checklist widely through our partner networks to make it more findable.

Using our partner university's computing hub, we have access to a system that can be expanded to increase usage easily and be resilient even in high-traffic situations. Recently, FSUS received about 500,000 hits per day and maintained its ability to deliver data to its users. We rely on this existing robust resource to ensure the Checklist remains available to the public.

Access

No rights or copyright will be asserted over the Checklist. We will place it in the public domain and explicitly state that with a [Creative Commons CC0](#) (public domain) license. The entire purpose of the project is to make these data available to anyone, free of charge or limitation.

Sustainability

The Consensus Plant Checklist of the United States flora is central to the mission of the Center for Plant Conservation (CPC), which recently celebrated its 40th anniversary. The institutional longevity and commitment to protecting plants and the understanding of their taxonomy is matched in our partner organizations: the North Carolina Botanical Garden is in its 60th year and its Flora of the Southeastern United States has been published and maintained for 20 years; NatureServe has been documenting plant taxonomy globally since 2000. The combined commitment between these organizations ensures long-term access to the Checklists created in this project and to maintaining the system that creates them. CPC is committed to providing long-term access to the Checklists through its website.

We propose a plan where an editor will serve a modest length term (perhaps 2-5 years) and, in that timeline, be the primary author of the Checklist product. This model is based on the editorial model used by many journals, which provides an opportunity for scientists to serve the community in an editorial role while receiving credit widely valued in the academic world. We anticipate that this model will allow botanists at various career levels to provide leadership and gain recognition.

IMLS Public Access Plan for Research Products

Consensus Plant Checklist of the United States

This plan describes how the project will provide timely public access to peer-reviewed publications and to the permissible scientific research data, documentation, and digital products generated through the award, consistent with the IMLS Public Access Policy Guidance

1. Peer-reviewed Scholarly Publications Access

- The project is expected to produce approximately two to four peer-reviewed scholarly publications during the award period. Likely outputs include articles on the methodology for developing a national consensus plant checklist, the governance and decision-making framework used to resolve taxonomic disagreement, and evaluation of the checklist as a research, conservation, and collections-support resource.
- For each peer-reviewed article resulting from the award, the project team will submit a machine-readable copy of the most appropriate version permitted under publisher policy to IMLS no later than the article publication date. In most cases, this will be the author accepted manuscript if the version of record cannot be deposited directly.
- Responsibility for compliance will rest with the Project Director, who will maintain an internal publication log tracking submission, acceptance, publication date, repository status, and confirmation of deposit to IMLS. Publications will also be made openly available through publisher open-access options or partner institutional repositories.

2. Permissible Scientific Research Data Management and Access

- The project will generate several categories of data and associated digital products. These will include versioned checklist datasets for the flora of the United States, synonymy and taxonomic relationship tables, proposal and decision records documenting areas of taxonomic disagreement and their resolution, voting summaries and decision rationales, release notes, metadata, data dictionaries, and workflow documentation describing governance and versioning procedures.
- The anticipated scale of the checklist is approximately 24,000 to 25,000 plant taxa across more than 250 plant families. Public releases will be issued in accessible, nonproprietary formats such as CSV and PDF, and current content will also be displayed through a searchable web interface.
- The project is not expected to generate sensitive biological data requiring restricted access. However, limited sensitive information could arise through project administration or evaluation, such as partner contact information or feedback from surveys and interviews. Any personally identifiable information will be removed before public release, and evaluation findings will be shared only in aggregate or de-identified form.
- If any data cannot be released publicly, the reason will be limited to protection of privacy, confidentiality, copyright, or other legal constraints. In those cases, the project will preserve and release as much of the underlying scientific and procedural record as possible while redacting or withholding only the restricted material.

3. Technical Requirements, Documentation, and Reuse

- The project is designed to minimize technical barriers to access and reuse. Public data products will be available primarily as CSV and PDF files and through a web platform supported by standard browser technologies. These products will not require specialized proprietary software to retrieve, display, or analyze. Any supporting tools used to display the data online will be accessible to the public through standard web access.
- Comprehensive documentation will be created and maintained alongside each public data release. This documentation will include metadata, data dictionaries, field definitions, taxonomic relationship descriptions, release notes, methodology statements, proposal templates, governance rules, and procedural guidance sufficient to support future interpretation and reuse.
- Documentation will be stored in open, durable formats such as PDF/A, TXT, Markdown, and CSV, as appropriate. Each release will be assigned a clear version number, and the same version identifier will be used consistently across data files, metadata, and release notes so that future users can reliably associate a dataset with the documentation that describes it.

4. Repository, Preservation, and Plan Review

- Versioned datasets and supporting documentation will be deposited in a trusted public repository such as Zenodo, or an equivalent repository that provides stable public access, long-term preservation, and persistent identifiers. In addition, current and archived versions of project deliverables will be disseminated through partner websites and the project's searchable public interface.
- Following the award period, the Center for Plant Conservation and its partners will continue to manage annual checklist snapshots, associated metadata, and documentation as part of the project's long-term sustainability strategy. Public proposal and decision archives, including the scientific rationale supporting checklist changes, will also be maintained in publicly accessible form whenever permissible.
- This Public Access Plan will be reviewed at project launch, during quarterly project management reviews, prior to each annual release, upon acceptance of any peer-reviewed manuscript, and during project closeout. The Project Director will oversee compliance, confirm timely deposit of publications and data, verify that documentation remains linked to the corresponding datasets, and ensure that any restricted information has been handled appropriately before release.