



2023 WSSA Endangered Species Special Committee Report

Updated January 9, 2024

Committee Name and Code: Endangered Species Act Committee (Special Committee established 2022)

Committee Chair: Bill Chism

Committee Members, 2023 (includes sub-committee members):

Aaron Hager, Univ. Ill, NCWSS
Brad Hanson, UC Davis, WSWS
Cameron Douglass, USDA
Emily Unglesbee, GROW
Frank Wong, Bayer Env. Sciences
Leah Duzy, Compliance Service International
Lee Van Wychen, WSSA
Mark VanGessel, Univ DE and EPA Liaison, NEWSS
Sarah Lancaster, KSU
Stanley Culpepper, UGA, SWSS
Taylor Randell-Singleton, UGA
Bill Chism, Chair, retired from EPA
Sarah Chu, TAMU, Graduate Student Representative
Daewon Koo, VT, Graduate Student Representative

Board of Directors Liaison:

Stanley Culpepper

Committee members rotating off and recommended replacements:

Sarah Lancaster, KSU, is rotating off
Frank Wong, Bayer Env. Sciences, is being added

Summary of past year's activities including:

Committee Goals

The Weed Science Society of America (WSSA) Endangered Species Act (ESA) committee was created to foster the protection of threatened and endangered (T & E) species and their habitat while protecting critical weed management tools through developing partnerships which maximize the WSSA's ability to communicate science-based information to regulators.

Goals for 2024:

- Add additional information to Endangered Species Act webpage.
- Provide input on herbicide label format in reply to EPA White Paper on Pesticide Labels.
 - Committee surveyed 15 weed scientists and will summarize their suggestions for the EPA.
- Produce and distribute additional ESA presentations for members and non-members.

- Find external partners such as state regulators, retailers, extension, or crop consultants to determine what additional information may be useful.
- Produce communication materials to help explain to our members what data would help with ESA assessments.
- Literature review of any phytotoxicity data on endangered or threatened plant species.
- Literature review on research to keep pesticides on the field (drift, runoff, and volatility) organized so that OPP can use the data to make locally informed decisions.

Summary of 2023 Activities

Committee accomplishments since the last annual meeting

- Conducted an Endangered Species workshop at the WSSA 2023 annual meeting to find out what scientific information the WSSA members could provide the EPA, FWS, NMFS, and USDA for their endangered species assessments.
 - Workshop took place on January 31, 2023 and over 170 people attended.
 - The workshop provided suggestions for communications, label reform, mitigations, and phytotoxicity testing. See Appendix A for a summary.
- Endangered Species Act webpage was created on WSSA website (<https://wssa.net/endangered-species/>).
 - Includes background information on landing page
 - Links to EPA webpage on Bulletins Live 2
 - Glossary of terms
 - Links to lists of threatened and endangered species on Fish and Wildlife and National Marine Fisheries Services websites.
- Developed a subcommittee with 14 weed scientists working on label structure
- Several committee members are working directly with the U.S. EPA and U.S. FWS on mapping threatened and endangered species and farm fields locations
- Endangered Species numerous presentations by committee members including a NCFAR Lunch-N-Learn presentation on Capitol Hill in June 2023.
- Committee provided 34 pages of comments on October 22, 2023 to the EPA on the Draft Herbicide Strategy Proposal.
- Committee provided 15 pages of comments on August 6, 2023 to the EPA on the Vulnerable Species Strategy.

Summary of plans for next year (changes in goals, key initiatives, plan of action, etc.):

- Update the ESA Communication webpage. Add two presentations on ESA, provide information on soon to be released final Herbicide Strategy, and suggested text on ESA for “Weed Guides.”
 - First presentation will be an introduction to the ESA that can be used in extension training. The second presentation will provide more information on impacts of ESA directed at WSSA members.
- Literature review of herbicide mitigation practices with supporting data.
- Literature review of herbicide phytotoxicity data on threatened and endangered species.
- Label Format – Committee will present recommendations to EPA in response to their “EPA: WHITE PAPER: Benefits of the Adoption of Structured Content and Digital Pesticide Labels.” Comments due March 14, 2024.

Recommendations for Board or Membership Action (funds or other requests):

Funds not used in 2023

- In 2023 we requested a total of \$18,000. \$ 6,000 for presentations and \$12,000 for literature reviews. But only spent ~\$1,300 (travel for Bill).

Funds requested for 2024: See attached project proposal form.

- Funding for literature reviews on existing mitigation research and phytotoxicity research. 2 literature reviews at \$6,000 per article. This work was not completed in 2023. Total of \$12,000.
- Funding for two presentations on ESA for \$6,000. This work was not completed in 2023.
- Funding for travel for Bill Chism – Make ESA presentations at 3 non weed science meetings at \$1,500 per meeting (meetings are not yet identified) = \$4,500

Other request for the Board:

- The ESA Committee is currently a Special Committee (created in January 2022) and would like to be converted to a Standing Committee.
- Feedback on directions the committee is taking, on partnerships being developed, and educational materials we have developed.

APPENDIX A. Endangered Species Act Committee: Short Term Goals from ESA Workshop at 2023 Annual Meeting

COMMUNICATION: Create ESA Repository. Many farmers and other pesticide applicators have little knowledge of the endangered species act (1973), do not think their state has these species, and do not understand the potential implications for pesticide usage.

- WSSA believes creating and sharing educational materials for growers and applicators would create useful a repository of these materials.
- Provide links to lists and locations of threatened and endangered species on FWS and NMFS websites.
- Help explain EPA's Bulletins Live Two webpage which describes pesticide usage restrictions to protect threatened and endangered species. <https://www.epa.gov/endangered-species/bulletins-live-two-view-bulletins> .

LABEL REFORM: Form a workgroup to simplify and standardize. Pesticide labels are too long, complex and difficult to understand often being over 100 pages. The WSSA should create a pilot program label workgroup to determine if standardizing the format, consistency, and simplicity would help users more accurately use pesticides and help EPA label reviews.

- Create a label workgroup to standardize format.
- Standard consistent format and simpler labels, would help users more accurately use pesticides and help the EPA review labels.

MITIGATION INFORMATION: Create Repository for Information. The WSSA will communicate how pesticides can be used while minimizing the impact to endangered species, learn and share how to support the growth T&E species and habitats, and provide the federal regulators with a better understanding of the times of year when herbicides are applied.

- **Mitigation Options.** Provide links to existing mitigation databases on WSSA website, publicize a success story of mitigation(s) that work, and develop a literature survey on mitigation methods and their ability to reduce runoff and drift.
- **Offsets, Species Reintroduction or Grow Species for Phytotoxicity Testing.** Create list of information and technical expertise (e.g., FWS) needed to help our members if they consider designing an offset, restoring a site, critical habitat, or growing a species for phytotoxicity testing.
- **Longer-Term: Crop Calendars/Timelines to Describe Pesticide Applications.** Work with IPM Centers to help develop more crop calendars to show when pesticide applications are made to compare to when threatened and endangered species are present.

PHYTOTOXICITY TESTING: Solicit and Forward Information. Very little information is available on the phytotoxic effects of herbicides on threatened and endangered plant species. Collecting that type of data would allow federal agencies to make a more accurate estimate of risks to plants.

- WSSA's ESA Committee would provide links to EPA's standard CFR §850 guidelines for aquatic and terrestrial plant toxicity tests on WSSA website.
- Identify other risk assessments where protocols for "non-guideline" toxicity or spray drift testing have been described and place links on WSSA website.