



**Committee Name and Code:** Targeted and Autonomous Weed Management Technologies (Special Committee Established 2023)

**Committee Chair:** Nathan Boyd

**Committee Members, 2023**

Muthu Bagavathiannan

Gregory Dahl

Luis De Avila

Steve Fennimore

Karla Gage

Lauren Lazaro

Marcelo Moretti

Lynn Sosnoskie

Bryan Young

**Board of Directors Liaison:** Gregory Dahl

**Committee members rotating off and recommended replacements:**

We have not yet set up a rotation schedule for this committee.

**Summary of past year's activities including:**

Committee Goals

There is substantial research occurring across North America focused on the use of artificial intelligence (AI), robotics, and other novel technologies for targeted and/or autonomous weed management. Most of this research is occurring outside of the Weed Science Society of America (WSSA). The Targeted and Autonomous Weed Management Technologies committee was created to address this issue in the following manner:

1. Foster outreach efforts to private and public entities working on targeted and autonomous weed management technologies that are not currently associated with the WSSA.
2. Increase awareness of these technologies and their use amongst the WSSA membership.
3. Provide a forum where researchers working in this field can share their results with the ultimate goal of encouraging collaboration and interaction.
4. Promote the development and training of graduate students in Weed Science with specialization in engineering.

Summary of 2023 Activities

In 2023 the committee was formed, and members selected. We began the process of defining our role, purpose, and goals. We also began the process of defining what makes our committee distinct from others and what types of technology we should focus on.

Summary of plans for next year

- Establish our vision statement and define our short and long-term goals.

- Establish a link on the WSSA website that provides a brief bio and contact information for Weed Scientists working in this field.
- Organize a symposium for the 2025 annual meeting.
- Develop an outreach plan to promote increased awareness of WSSA amongst private and public entities.

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

Funds requested for 2024

- Funding for travel for Nathan Boyd to travel to 2 non-weed science meetings (\$2,500/meeting) to make presentations focused on the expertise that the WSSA provides and the benefits associated with interacting with the membership. Meetings have not yet been identified but potential options are the annual meeting of the ASABE or FIRA USA. Total funds: \$5,000
- Funding to cover the travel costs of 2-4 non-members of WSSA to present at a symposium at the 2025 annual meeting. Participants have not yet been identified but we will focus on engineers located at public or private institutions. An amount is not specified in this request because Dr. Nathan Boyd is not aware of typical funding provided for symposium speakers at WSSA and therefore will leave it up to the discretion of the board to determine a reasonable dollar amount.

Other request for the Board:

- The Targeted and Autonomous Weed Management Technologies Committee is currently a Special Committee (created in 2023) and would like to be converted to a Standing Committee.