**Educational Objectives:**

Our educational objectives are: 1) to provide high-quality teaching in the core soil, stewardship, biology, plant selection and management, pathology, entomology, weed science and IPM content of the Extension Master Gardener (EMG) intern program in a way that is sustainable for agents, specialists, and volunteers; 2) to introduce new volunteers to the land-grant university mission and the many excellent members of Tennessee Extension that carry out this mission through research, teaching, and outreach; and 3) to introduce new volunteers to the collaborative and respectful culture of our Tennessee EMG program through a statewide training that models our connection across the state and in county programs.

**Program Activities:**

Our EMG program is based upon a training model with 40 hours of foundational content as well as 40 hours of community service during the first year. This substantial investment both prepares volunteers in terms of horticultural content but also connects them relationally with local Extension personnel and other volunteers. Intern training is the crucial foundation of our volunteer program in terms of content, people, and culture.

Prior to 2020, intern trainings occurred as individual county classes. But, those dark rooms with long PowerPoint lectures weren’t sufficient to meet the current needs in horticulture outreach our agents and volunteers were seeing or to engage new generations. Additionally, the time and travel burden on Extension specialists and agents was not sustainable. It was the pandemic and the focus on technology that helped rapidly modernize our training model. In 2021, our team deployed our first collaborative intern training with continual improvements in 2022, 2023 and 2024.

In all of those years, we have focused on a live, local model where all counties have weekly in-person classes. Our goal is to utilize technology to keep the trainings local because they are crucial for relationship building between interns and the leadership effectiveness of the local coordinator. We want to build a training program that sustains live and local not replaces it with an online model.

In 2022, our collaborative training included 13 live 2-hour zoom lecture sessions. That 26 hours of live teaching was combined with a foundational set of hands-on lessons provided to all agents. This curriculum focused on plant biology, soil science, landscape management, non-commercial food production, insect, weed and disease management, and stewardship of water, soil, and plant resources. A website was developed to support intern trainees and provide access to supplemental content and recordings of the lectures.

In 2023, we clearly delineated two similar but unique training models. The synchronous model was built on interns attending county meetings that began with the live lectures (reduced in 2023 to 90 minutes) followed by local interactive labs and activities for the remaining 90 minutes. The asynchronous model was designed to be a flipped classroom system where interns watched the lectures ahead of time and then met locally for a 90-to-120-minute lab and activity. Often these asynchronous classes are in the evening. The reduced in-class time has been valuable for the inclusion of working professionals.

In 2024, we built on the synchronous and asynchronous models with the introduction of pre-watch lecture modules to include more Extension agent teachers and ensure that content was more synergistic. Additionally, self-paced activities were included on the websites as well as application questions for each topic and summaries of common questions and answers for each week to provide a wide range of content to support in-depth engagement of volunteers.

**Teaching Methods:**

Our goal is to utilize a range of teaching methods to ensure our content is accessible and applicable to all. We have developed a cohesive curriculum that integrates concise lectures with hands-on local interactive teaching and digital resources. Local coordinators are equipped and prepared to implement this curriculum with a facilitation guide (attached as an additional resource) based on current pedagogy and in-service trainings. We want to be research-based in the methods of teaching as well as the content. The curriculum includes:

* High, quality lecture teaching from specialists and agents around the state delivered through two dynamic 40-minute lectures in a 90-minute session. We intentionally include faculty, specialists, and agents to ensure diverse perspectives.
* Two simple to access web platforms for synchronous and asynchronous trainings provide interns with access to all lectures, resources, and activities.
* Augmented teaching resources, including short pre-watch lectures as well as self-paced activities and integration questions that help to increase the learning through personal application of the information.

**Results:**

We have seen positive survey results and increased county participation. In 2022, there were 384 interns with 536 in 2023 and 584 in 2024 representing almost every EMG county. Other key results include coordinators being able to learn and implement this training quickly. With both clear guidance and flexibility, this training is simple to implement and enables coordinators to focus their energies on their own areas of strength and topics of most need in their counties rather than needing to plan for the whole training.

It isn’t just the quality and cohesion of collaborative lectures that are the foundation, it is also interaction in the local county. All counties meet in person to view the lectures and then spend time engaging and hands-on teaching (synchronous) or meet in person for hands-on teaching after viewing the lectures on their own (asynchronous). This enables more experiential learning while also encouraging the building of connections and relationships that are foundational for the EMG program. We have received very positive feedback on the quality of teaching as well as the connection opportunities. We also saw that digital delivery lowered barriers of access as we saw a more diverse group of trainees and an ability to connect across generations and the urban to rural spectrum.

**Evaluations and Impact Statements:**

Each year, we do a pre-training survey and a post-training survey. These evaluations have demonstrated the success of this training model in delivering high-quality content but also in teaching the collaborative and supportive culture of our program as demonstrated by the valuation of connections across the state.

In 2022, there were significant gains in knowledge in all topics with increases ranging from 39% for well-known topics, such as herbaceous plants to 57% for lesser-known topics, such as turfgrass. There was also a 90% or higher rating for the quality of print and digital resources, quality of lectures, and opportunity to build relationships locally.

In 2023, trends in knowledge gained were similar to 2022 and an average increase of 42% in all topics. For both the synchronous and asynchronous trainings, connection to agents and specialists across the state and interactive activities and labs were the top two rated items demonstrating a similar experience in the two teaching models.

In 2024, the knowledge gained was once again 42-44%. Participants reported nearly $1,500 in average value from the EMG intern training. Connections across Tennessee EMG was rated as the most valued aspect of the training program with opportunities to build relationships and flexible access to the content also rated highly in demonstration of the content and culture aspects of the program both being valued.