## Farm Bill Final Accomplishment Report

<table>
<thead>
<tr>
<th><strong>Year:</strong></th>
<th>FY2015</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>State:</strong></td>
<td>Maine</td>
</tr>
<tr>
<td><strong>Cooperative Agreement Name:</strong></td>
<td>Forest Pest Outreach and Survey Project</td>
</tr>
<tr>
<td><strong>Cooperative Agreement Number:</strong></td>
<td>15-8223-0662-CA</td>
</tr>
<tr>
<td><strong>Project Funding Period:</strong></td>
<td>9/20/2015 – 9/19/2016</td>
</tr>
<tr>
<td><strong>Project Report:</strong></td>
<td>Farm Bill FPOSP Final Report</td>
</tr>
<tr>
<td><strong>Project Document Date:</strong></td>
<td>12/8/2016</td>
</tr>
<tr>
<td><strong>Cooperators Project Coordinator:</strong></td>
<td>State Survey Coordinator</td>
</tr>
<tr>
<td><strong>Name:</strong></td>
<td>Karen Coluzzi</td>
</tr>
<tr>
<td><strong>Agency:</strong></td>
<td>Maine Department of Agriculture, Conservation and Forestry (DACF)</td>
</tr>
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<td>28 State House Station</td>
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<td><strong>City/ Address/ Zip:</strong></td>
<td>Augusta/ME/04333</td>
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<td><strong>E-mail:</strong></td>
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</tr>
</tbody>
</table>
1. Approach

a. Describe specific activities and accomplishments...

The cooperator (DACF) accomplished the following goals by the end of the agreement period:

1. Contract with one of more entities that will be chosen through a competitive RFP Process…

As stated in the midyear report, DACF contracted with two NGOs that submitted proposals to conduct invasive forest pest outreach. The final reports for both organizations are attached.

2. Maintain a list of outreach and training activities, tabling events, media contacts and targeted audience participants and report on these per reporting requirements in the cooperative agreement.

A database is maintained by the cooperator that tracks all events related to FPOSP outreach. Although we are no longer building up a volunteer base through the Department (due to the change in direction by contracting with SRRC and MACD), we solicit activity reports from our previously trained volunteers, and participated in various outreach activities. Below is a list of events by MDACF staff and/or volunteers for the reporting period (January 1 – September 19, 2016). This does not include events by SRRC or MACD.

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Event</th>
<th>Type</th>
<th># Impacted</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/12/16 – 1/14/16</td>
<td>Augusta</td>
<td>Agricultural Trades Show</td>
<td>Staffed invasive pest display booth</td>
<td>2500</td>
<td>2 1/2-day show; one of the most popular booths at the show. Pics attached</td>
</tr>
<tr>
<td>2/26/16</td>
<td>Augusta</td>
<td>MACD Staff Training</td>
<td>Invasive Forest Pest Presentation</td>
<td>9</td>
<td>Updating MACD educators on invasive forest pest issues</td>
</tr>
<tr>
<td>4/13/16</td>
<td>Knox</td>
<td>Ingraham Equipment Fair</td>
<td>FPOSP materials on display</td>
<td>400</td>
<td>DCAF staff had our invasive forest pest outreach material at table.</td>
</tr>
<tr>
<td>4/15/16</td>
<td>Unity</td>
<td>2016 Teddy Roosevelt Maine Conservation Award Ceremony</td>
<td>Award Ceremony</td>
<td>80</td>
<td>Massabesic Middle School Teacher Pat Parent, an FPOSP trained volunteer, and his team won this award for their annual Invasive Species Forum.</td>
</tr>
<tr>
<td>5/12/16 – 5/13/16</td>
<td>Jefferson and Waldoboro</td>
<td>Arbor Day – K-12 Education</td>
<td>Invasive Forest Pest and Tree I.D. to elementary schools</td>
<td>120</td>
<td>Assisted a Central Maine Power arborist with invasive tree pest education to school children. Pics attached</td>
</tr>
<tr>
<td>5/14/16</td>
<td>Fryeburg</td>
<td>All Things Invasives Fair</td>
<td>Invasive Tree Pest walk and talk</td>
<td>20</td>
<td>Constructed invasive tree pest display boards and attached to host trees to have more experiential education. Pics attached</td>
</tr>
</tbody>
</table>
3. Develop and/or maintain an in-state electronic list of citizen volunteers for present and future pest detection communications as well as requests for assistance.

We maintain a database of all trained volunteers from 2009 to 2015, plus additional citizens who have expressed interest in staying involved with invasive forest pest issues. We currently have over 600 names in the database. These names have been transferred to the subscription list of our electronic newsletter, Invasive Pest Outreach News, which currently has 1463 subscribers and is delivered electronically 4-6 times a year. Three newsletters were delivered during this reporting period (January 1 – September 19, 2016):

- **Invasive Pest Outreach News – Spring I**
- **Invasive Pest Outreach News – Spring II**
- **Invasive Pest Outreach News – Summer I**

In addition, we regularly post to our Maine Bug Watch Facebook (539 likes) and Twitter (214) pages, to not only inform followers of pest updates, but announce events and volunteer opportunities.

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Event Description</th>
<th>Kids Educated</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/20/16</td>
<td>Windsor</td>
<td>Northeast Livestock Expo; Kids Day</td>
<td>250</td>
<td>Kids colored ALB, EAB, firewood outreach templates that were made into buttons. Pics attached</td>
</tr>
<tr>
<td>5/20/16</td>
<td>Yarmouth</td>
<td>Arbor Day /EAB Outreach</td>
<td>125</td>
<td>Yarmouth tree warden educates K-12 on trees and invasive forest pests.</td>
</tr>
<tr>
<td>7/4/16</td>
<td>Bar Harbor</td>
<td>Acadia National Park Centennial Parade and Science Day</td>
<td>2500</td>
<td>Costumes and outreach coordinated by Judy Hazen Connery of Acadia National Park. Pics attached</td>
</tr>
<tr>
<td>7/21/16</td>
<td>Rockland</td>
<td>Garden and Tree Pest Workshop</td>
<td>10</td>
<td>Educated young children about good and bad bugs (ALB, EAB).</td>
</tr>
<tr>
<td>9/13/16</td>
<td>Augusta</td>
<td>Bug Maineia</td>
<td>850</td>
<td>Large extremely active booth educating primarily on firewood as a vector for invasive forest pest introductions. Pic attached</td>
</tr>
<tr>
<td>9/14/16</td>
<td>Oxford</td>
<td>Oxford County Fair – Ag Day</td>
<td>65</td>
<td>Drew kids in with live insects and talked about invasive forest pests.</td>
</tr>
</tbody>
</table>

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**Maine DACF-FPOSP Social Media Metrics**

<table>
<thead>
<tr>
<th>Type</th>
<th>Name</th>
<th># subscribers prior to 9/19/16</th>
<th># subscribers by 9/19/16</th>
<th>% increase</th>
<th># posts</th>
<th>engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newsletter</td>
<td>Invasive Pest Outreach News</td>
<td>1307</td>
<td>1463</td>
<td>12</td>
<td>3</td>
<td>31% &quot;unique opens rate&quot;</td>
</tr>
<tr>
<td>Facebook</td>
<td>Maine Bug Watch</td>
<td>436</td>
<td>539</td>
<td>23.6</td>
<td>153</td>
<td>211 &quot;avg post reach&quot;</td>
</tr>
<tr>
<td>Twitter</td>
<td>Maine Bug Watch</td>
<td>174</td>
<td>214</td>
<td>23</td>
<td>147</td>
<td>223 &quot;impressions per day&quot;</td>
</tr>
</tbody>
</table>
4. Coordinate FPO Events with National Outreach efforts, including Earth Day (4/22/16) and National Invasives Species Awareness Week (2/21/16 – 2/27/16).

We tried to coordinate with SRRC and MACD to bolster outreach and event development coinciding with these events, but only managed to advertise NISAW week through the newsletter and various Facebook/Twitter posts. We encouraged people to plant trees for Earth Day. We conducted many outreach events that coincided with Emerald Ash Borer Awareness Week (May 2016) and Maine Arbor Week (5/15/16- 5/21/16).

5. Cooperate with other agencies, contractors, and NGOs to develop and coordinate outreach specified in the RFP (above).

We shared all our materials, including posters and presentations to SRRC and MACD so that the technical information and message for forest pest outreach remains consistent. We made more outreach displays of ALB and EAB insect and wood damage to distribute to our cooperators. We continually develop, print and distribute outreach materials to these groups and our trained volunteers.

Approved and signed by

Cooperator

Date: 12/14/2016

ADODR

Attachments:
- Photos: Agricultural Trades Show, Arbor Day/EAB Outreach-Jefferson Village School, “All Things Invasives” Fair, NELE Event, Bug Maine-ia, Acadia National Park Centennial Celebration
- SRRC Final Report
- MACD Final Report
Agricultural Trades Show 2016 – Bug Watch booth

Arbor Day Education - Jefferson Village School

“All Things Invasives” Fair – EAB walk and talk

“All Things Invasives” Fair – ALB walk and talk

“All Things Invasives” Fair – HWA walk and talk
**SRRC Final Report**


**JAN- MAR:**
- Planned for upcoming inaugural “All Things Invasives” Fair.
- Prepared for interns and recruited for in-the-field outreach on the Saco River this summer. A returning intern will continue to do bio-surveillance with Cerceris wasps and covering our busy landings on the Saco monitoring for out of state firewood and outreach/education.

**APR-SEP:**
- Two interns from Fryeburg Academy worked with us at Swans Falls Campground and Education Facility. We have been educating everyone that comes into the visitor center about moving clean boats and not transporting firewood. The displays and tools that DACF provided helps us effectively teach and educate visitors and locals about the invasive threats we face and what to look for.
- We designed a survey sheet to record incoming firewood. Although this is the first year we’ve tracked incoming firewood, it seems we are seeing less out-of-state firewood. People are getting the message about out-of-state firewood, but we are seeing more in-state firewood coming from long distances.
- We worked on our new outdoor education area and have cleared and set up some trees to be used for seating. We plan to build a canopy for outreach events in inclement weather.
- We posted invasive forest pest information at all access areas (e.g. boat launch, campsites, etc.) *(pic. 1)*, and outfitted the visitor/education center with insect and wood displays. *(pic. 2)*

<table>
<thead>
<tr>
<th>DATE</th>
<th>EVENT</th>
<th># ATTEND</th>
<th>PARTNERING ORGANIZATION(S)</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/27/16</td>
<td>Fryeburg Business Association Annual Meeting; Fryeburg Academy (FA)</td>
<td>Over 200</td>
<td>Fryeburg Academy, Maine Tourism Association</td>
<td>SRRC display set up in the foyer for the FBA annual meeting. Talked to visitors about our efforts on the river and our internship programs, including Cerceris bio-surveillance work and more.</td>
</tr>
<tr>
<td>2/28/16</td>
<td>Maine Milfoil Summit at University of Southern Maine, Lewiston, ME</td>
<td>Over 300</td>
<td>ME DEP and Lakes Environmental Association (LEA)</td>
<td>Networked with participants to recruit expertise and interest for the “All Things Invasives” Fair.</td>
</tr>
<tr>
<td>3/16/16</td>
<td>St. Joseph’s College Career Fair, Raymond, ME</td>
<td>20</td>
<td>St. Joseph’s College</td>
<td>Set up display about SRRC and its environmental initiatives, including invasive forest pest outreach, to recruit summer interns. <em>Pic. 3</em></td>
</tr>
<tr>
<td>4/12/16</td>
<td>Free Cone Day; Ben &amp; Jerry’s, Conway, NH</td>
<td>Over 100</td>
<td></td>
<td>Free ice cream cone day for the community. Distributed flyers for upcoming invasives fair and ‘don’t move firewood’ outreach.</td>
</tr>
<tr>
<td>4/23/16</td>
<td>Maine Land Trust Network Conference, Topsham, ME</td>
<td>Over 500</td>
<td></td>
<td>State landtrust networking conference; set up SRRC booth to educate on our environmental initiatives, including the threat of invasive forest pests and firewood movement.</td>
</tr>
<tr>
<td>5/14/16</td>
<td>“All Things Invasives” Fair; Swan’s Falls Campground and Education Facility, Fryeburg, ME</td>
<td>~30</td>
<td>DACF, LEA, York Co. SWCD, Upper Saco Valley Land Trust</td>
<td>Great day with our partners providing outreach about the invasive threats we face including forest pests, aquatic invasives, terrestrial invasives and much more. <em>Pics. in DACF report</em></td>
</tr>
<tr>
<td>6/8/16</td>
<td>Maine Master Naturalist Tier One Program; Maine Lakes Science Center, Bridgton, ME</td>
<td>35</td>
<td>LEA</td>
<td>Presented to a great group of environmental students on the threats of invasive forest pests, using beetle displays and wood samples provided by DACF. Students took FPOSP tri-posters <em>(pic. 4)</em> to post at trail heads and local beach access areas.</td>
</tr>
<tr>
<td>Date</td>
<td>Event Description</td>
<td>Involved</td>
<td>Details</td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>-----------------------------------------------------------------------------------</td>
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<td>-------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>6/14/16</td>
<td>Saco River Volunteer Spring Cleanup; Swan’s Falls Campground and Education Facility, Fryeburg, ME</td>
<td>65</td>
<td>Biannual river cleanup provides great opportunity for invasive forest pest outreach. Explained the threat related to firewood movement, and how to look for signs of infestation. Handed out tattoos, pencils, flyers, etc.</td>
<td></td>
</tr>
<tr>
<td>6/17/16</td>
<td>SRRC Intern training; Swan’s Falls Campground and Education Facility, Fryeburg, ME</td>
<td>2</td>
<td>Trained interns on invasive forest pests, including having them watch “Lurking in the Trees”. They worked at Canal Bridge access on weekends as “river ambassadors”, watching for out of state firewood, etc. They will do ash tree and invasive surveys at our facility and along the river. We hope to do some Cerceris Wasp surveys during their internship this summer.</td>
<td></td>
</tr>
<tr>
<td>July-August</td>
<td>Visitor Outreach; Swan’s Falls Campground and Education Facility, Fryeburg, ME</td>
<td>thousands</td>
<td>Trained interns provided outreach and assistance to hundreds of people accessing the river each weekend. Also surveyed visitors about firewood origin and usage, as well as confiscated some loads.</td>
<td></td>
</tr>
<tr>
<td>9/7/16</td>
<td>Outreach to Maine Environmental Science Academy; Swan’s Falls Campground and Education Facility, Fryeburg, ME</td>
<td>31 students; 3 teachers</td>
<td>Introduction to the efforts of the SRRC and invasives. Focus on ALB and EAB. This class will continue studying the EAB and work with us on efforts to survey and monitor.</td>
<td></td>
</tr>
<tr>
<td>9/10/16</td>
<td>Saco River Volunteer Fall Cleanup; Swan’s Falls Campground and Education Facility, Fryeburg, ME</td>
<td>150</td>
<td>Biannual river cleanup. Using permanent invasive forest pest display, educated scout troops from MA and RI. Handed out tattoos, pencils, flyers, etc.</td>
<td></td>
</tr>
</tbody>
</table>

![One of four billboards at Swans Falls](image1)

![Visitor Center](image2)

![Career Fair](image3)

![Tri-poster developed by DACF](image4)
1. Press Releases and Additional Media

The MACD Employees Committee coordinated press releases for 7 events held from January 1, 2016 through March, 2016, through both statewide press releases and local press releases, as well as through conservation district newsletters, annual reports and publications via our conservation partners. These include the Maine Department of Agriculture, Conservation and Forestry (DACF) press releases to a growing network of over 3,700 people, up from approximately 2,500 people in December, 2015. The DACF Maine Forest Service’s Woodwise Wire, Project Canopy, the University of Maine Cooperative Extension, the Small Woodland Owners Association of Maine, the Pemaquid Watershed Association, the Midcoast Conservancy and the Georges River Land Trust all promoted our events through their networks and newsletters. The USDA Natural Resources Conservation Service also distributed PR through their list serve and media connections both at the local and national level, which enabled the PR to be redistributed though the Associated Press to multiple outlets as far away as Myrtle Beach, South Carolina, Laredo, Texas and San Francisco, California!

Press releases were published in the Portland Press Herald, and the Central Maine Sentinel and Kennebec Journal, which are the official media outlets for the State of Maine, as well as other major outlets, such as the Bangor Daily News, the Lewiston Sun Journal, the Lincoln County News, the Maine Environmental Policy Institute’s Maine Environmental News, and the EPNewswire, a business journal focused on the intersection of science-based regulation and basic industries, including food, energy and chemical production. They were also distributed via conservation districts in Maine to local media outlets in 12 higher priority counties.

The Maine Public Broadcasting Network also featured a news segment on invasive forest pest threats in Maine, and focused on MACD’s role in education and outreach through workshops and events in Maine. Their news segment “QUEST: Investigating our World” has featured several news segments on invasive threats in Maine over the past several years, which has helped to inform Maine residents and visitors of these threats and what to do if a threat is suspected in an area.

2. Website and Facebook Posts

The same PR was publicized through multiple website and Facebook pages, including the DACF page, the MACD page, our conservation partners, and through individual conservation districts throughout Maine. The social media outreach for this grant project was greatly expanded upon in the 2nd quarter as we coordinated the hosting of five workshops and also the State of Maine Agriculture Trade Show in
Augusta in January and the Penobscot County Conservation Alliance’s Sportsman’s Show in Orono in March.

3. **Train the Trainer Sessions**

A Train the Trainer Session was the focus of a Technical Delivery Team Meeting that was held on February 26th in Augusta. This session focused on the presenters preparing for their presentations, including reviewing the agendas, information packages, Power Point delivery and the visual displays. Participants in this meeting included Hildy Ellis, Rebecca Jacobs, Mary Thompson, Jean Federico, Joe Dembeck and others than are preparing to give presentations at workshops. The training session also included a question and answer session facilitated by Jeannie and Hildy, and prepared the team to schedule and deliver presentations throughout the 12 counties in Maine that are the focus of this grant.

4. **Workshop Agenda**

Rebecca Jacobs, Educational Coordinator of the Knox-Lincoln Soil and Water Conservation District, and Jeannie Federico, developed sample workshop agendas that are being used as templates for workshops and events throughout the state. Rebecca, in addition to Jeannie, has extensive experience presenting information on invasive pests. The agenda, and additional presentation materials, are all available on the MACD SharePoint Library for easy access to all team members. Some workshops are classroom only sessions and some in the warmer months will also have field sessions to provide first-hand knowledge to participants, but all workshops will have the same agenda. The March workshops were all classroom only sessions. Workshop content has slightly differed throughout Maine based on the invasive pests already present in some regions in Maine, or that pose a greater threat to Maine’s forests in some regions based on proximity to current invasive populations.

5. **PowerPoint Developed**

Rebecca Jacobs also developed a PowerPoint, which she adapted from programs presented by DACF over the years of the outreach project. Jeannie Federico tailored this Power Point for the Adult Education classes in Oxford County to include additional information on Emerald Ash Borer which is a great threat in this county. The presentations are aimed at increasing awareness of landowners, professionals and the general public about the threats posed by invasive pests, how to recognize the pests and/or their presence through damage to host trees, and how to report suspected invasions.

6. **Presentation Materials Developed**

Jeannie Federico developed the workshop content based on previous workshops she has led. The workshop content includes multiple handouts from the DACF as well as a handout about “Host Trees” that Jeannie developed.

7. **Education Credits for Workshops**

Education Credits were approved for workshops from the Society of American Foresters and the DACF Maine Board of Pesticides Control. Each workshop hour translates to a continuing education credit. Nine workshop participants from 5 workshops have requested credits from the Society of American Foresters and 6 participants from these workshops have requested credits from the DACF Maine Board of Pesticides Control. MACD submitted workshop credit requests with signup sheets for all of these participants.

8. **Workshops Scheduled with Conservation Partners**

Five Workshops were held in 4 counties in Maine in March, 2016, and several other workshops were scheduled for additional counties in Maine that will be held in the spring and summer of 2016, including workshops in Lincoln, Sagadahoc, Somerset and Waldo Counties. The Small Woodland Owners Association of Maine (SWOAM) contacted MACD and offered to be a partner for every workshop presented by MACD under this grant. A Workshop and Event Schedule is maintained on the MACD
SharePoint site for easy access for all Technical Delivery Team members to post and share their workshop information.

The 1st workshop was held on March 4th, in Hancock County at the Ellsworth City Hall in partnership with SWOAM. Mary Thompson served as the presenter. There were 45 participants. The participants greatly appreciated gaining overall awareness of issues related to invasive forest pests in Maine. Participants noted that particularly helpful information were the sections on pest identification with photos and samples of pests, their life cycles and the damage they create, although some participants noted on evaluation forms that they would have liked more examples. Many workshop evaluation respondents noted that they will be able to integrate the workshop information into their work, including how to monitor and identify if invasive pests were present at a site.

The 2nd and 3rd workshops were held on March 7th and 17th at the Oxford Comprehensive Hill High School in Oxford County in partnership with SWOAM and Prentice & Carlisle. Prentice & Carlisle Forester, Chandler Buie organized these adult education events, as part of a 6 week, 8 session Woodlot Management Adult Education course. Jeannie Federico served as the presenter. There were 15 participants for the March 7th workshop and 10 participants for the March 17th workshop.

The 4th workshop was held on March 23rd in Franklin County at the Wilton Town Office in partnership with SWOAM and the University of Maine Cooperative Extension. Joe Dembeck, Somerset County Executive Director served as the presenter. There were 25 participants and the information was very well received. Numerous questions by the audience on the various pests were discussed. There was an overwhelming sense of concern about the current pests in Maine such as the Hemlock Wooly Adelgid (HWA) and the Winter Moth, and more questions about the Asian Longhorned Beetle and Emerald Ash Borer (EAB). Participants were very interested in knowing how to identify pests and what signs to look for in damaged trees.

The 5th workshop was held on March 23rd in Androscoggin County at the Lewiston USDA Service Center in partnership with SWOAM. Jean Federico served as the presenter. There were 15 participants, including several from the Auburn Public Works Department. The training went very well and they were very involved with the information. The audience had a variety of interests and backgrounds. Some of the additional organizations that were represented at the workshop were the Stanton Bird Club, Maine School Garden Network, City of Lewiston Landscaping and Treework Division, Community Forest Subcommittee of Auburn, and the City of Auburn Parks Department. Others in the room were private landowners, small landscaping or tree removal business owners, and interested individuals.

Jeannie gave a very informative yet practical presentation of the major risks to Maine’s forests due to forest pests. The audience was interested in HWA and the risk of spreading it. Questions were asked about what to do with branches trimmed from a walkway, bridge, or heavily traveled area. There were also questions raised about telling the difference between Bruce spanworm or other native moths that are present in the winter and the invasive Winter Moth. There were many questions about the Winter Moth life cycle and even a suggestion that a handout be made with each invasive insect and their life stage broken down monthly. When EAB was discussed, questions about early detection and where to look for damage on host trees were asked.

Overall, the workshop was a great success. Evaluations showed satisfaction from audience. The noted strong points were; identification, insect and host tree damage samples, and handouts/reference material. The workshop goers said that they will be able to use the skills learned to identify pests, report these sightings, inform others, and have an increased awareness while out in the field. Suggestions from the audience for improvement were to include tree disease identification, more information on native pests and their identification, and more information about insect life cycles.
Examples of the educational displays at the MACD Invasive Forest Pest Workshops, which also includes handouts in addition to the information packages all participants received, samples of wood showing invasive pest damage, and samples of invasive pests. Provided by DACF.

The Ellsworth City Hall Workshop in Hancock County was the first invasive forest pest workshop hosted by MACD, in partnership with SWOAM, and had 45 participants.

9. Additional Outreach Events

The first outreach and education event by the committee for this grant project was the Maine Department of Agriculture, Conservation and Forestry’s (DACF) Agricultural Trade Show held from January 12th to 14th, 2016, at the Augusta Civic Center in Kennebec County. In a press release for this event, Karen Coluzzi, State Pest Survey Coordinator highlighted the MACD booth and the DACF Bugwatch booth that both provided information on invasive forest pests, as well as presentations by Maine Forest Service’s Forest Entomologists Allison Kanoti and Colleen Teerling.

The Agricultural Trade Show featured a dynamic MACD booth with a tri-fold display and multiple handouts provided by the DACF that were geared to many types of individuals and groups, including the general public, foresters, loggers, arborists, landowners, campground owners and natural resource
professionals. The booth was busy with visitors throughout the show, and over 250 people stopped at
the booth to actively engage with the team member staffers, whether to ask questions or report their
experiences or to add their names to a contact list to learn about upcoming workshops and events.

The Penobscot County Conservation Alliance’s Sportsman’s Show in Orono that was held from March
11th to 14th also featured a similar booth for invasive forest pest education and outreach with a display
and information similar to the Agricultural Trade Show. Hundreds of participants came from every
region of the state and many of these stopped to talk with those staffing the booth and providing
outreach.

Additional fairs that will have information include the Farmington Fair in Franklin County, Maine Farm
days in Kennebec County, Ossipee Valley Fair in Oxford County, the Union Fair in Knox County and the
Knox-Lincoln Plant Sale. Plans were made for outreach at additional fairs and events in partnership with
the Maine Forest Service, which has a strong presence at several fairs and is committed to providing
technical assistance for this grant.

The Technical Delivery Team will be providing outreach to municipalities through public works
departments in June at the Highway Congress located in Somerset County, Maine, with the goal of these
public works officials bringing the information to town managers for follow up management planning for
invasive forest pests in their local communities.

The Maine Department of Agriculture, Conservation and Forestry’s Agricultural Trade Show in January featured this MACD
booth on Invasive Forest Pests. A similar booth was featured at the Penobscot County Conservation Alliance’s Sportsman’s
Show in March.

10. Evaluation and Assessment Metrics

Dale Finseth, Kennebec County SWCD Executive Director, has a background in developing evaluation
and assessment metrics for grants and contracts, and developed a table to use for this grant project. The
table/metric that Dale designed and is using with the Technical Delivery Team provides monthly data
regarding the project’s public contacts and outreach activities. This metric documents all education and
outreach activities. Specific "workshop data" is part of the metric, and enables the project to track
specific activities in addition to cumulative estimates of the resulting public effectiveness of the efforts.
In addition, all workshop events will include evaluation forms in order to determine the effectiveness of
the presentations and collect suggestions for further activities.
1. Press Releases and Additional Media

Conservation districts in 5 counties coordinated invasive forest pest workshop and event press releases and promotional flyers for 6 events held from April 1, 2016 through June, 2016, with templates provided from the MACD Employees Committee. Promotion for these events was provided through both statewide press releases and local press releases, as well as through conservation district newsletters and publications via our conservation partners. The Maine Department of Agriculture, Conservation and Forestry (DACF) press releases, the DACF Maine Forest Service’s Woodswise Wire, Project Canopy, the University of Maine Cooperative Extension, the Small Woodland Owners Association of Maine (SWOAM), the Pemaquid Watershed Association, the Midcoast Conservancy, the City of Bath and the Town of Searsmont all promoted our events through their networks. The USDA Natural Resources Conservation Service also distributed PR through their list serve and media connections both at the local and national level.

Press releases were published in Maine Today, the Lewiston Sun Journal, the Lincoln County News, the Maine Environmental Policy Institute’s Maine Environmental News, and the EPNewswire, a business journal focused on the intersection of science-based regulation and basic industries, including food, energy and chemical production. They were also distributed via conservation districts in Maine to local media outlets in the counties that hosted events.

2. Website and Facebook Posts

The same PR was publicized through multiple website and Facebook pages, including the DACF page, the MACD page, our conservation partners, and through individual conservation districts throughout Maine. The social media outreach for this grant project was continued through conservation districts and through our partners.

3. Education Credits for Workshops

Education Credits were approved for workshops from the Society of American Foresters and the DACF Maine Board of Pesticides Control. Each workshop hour translates to a continuing education credit. Professionals also pursued workshop credits through the State of Maine Board of Licensure of Foresters and through the International Society of Arboriculture. Three workshop participants from 3 workshops requested credits from the DACF Maine Board of Pesticides Control (BPC), 2 workshop participants from 2 workshops requested credits from the Society of American Foresters (SAF) and 1 participant each requested credits from the State of Maine Board of Licensure of Foresters and from the International Society of Arboriculture. MACD submitted workshop credit requests with signup sheets for credits from the BPC and SAF.

4. Workshops Scheduled with Conservation Partners

Four Workshops were held in 4 counties in Maine in April and May, 2016, with workshops in Lincoln, Sagadahoc, Somerset and Waldo Counties. SWOAM continued to serve as a valuable partner for every workshop presented by MACD under this grant. A Workshop and Event Schedule is maintained on the MACD SharePoint site for easy access for all Technical Delivery Team members to post and share their workshop information.
The 1st workshop scheduled during this grant quarter was at the April 2nd Rural Living Day in Waldo County. This workshop was cancelled due to only 2 people who had pre-registered. These people were referred to the Searsmont Town Office Workshop on April 19th. Although the Rural Living Day is hosted by the University of Maine Cooperative Extension that has served as a valuable conservation partner for promoting the invasive forest pest outreach and education events throughout the state, in this case the Rural Living Day PR had not included information about the workshop which was a factor in its cancellation.

The 2nd workshop was held by the Knox-Lincoln Soil and Water Conservation District in partnership with SWOAM, the Pemaquid Watershed Association and the Midcoast Conservancy at the conservancy’s office in Wiscasset. Mary Thompson, Knox-Lincoln SWCD Conservation Technician, served as the presenter for this workshop. The Pemaquid Watershed Association and Midcoast Conservancy staff helped set up for the presentation. There were 18 participants from various walks of life who were very engaged in forest invasive pests. Two attendees requested recertification credits from BPC and 1 from SAF. Questions centered on aspects of the different pest, how to get an insect identified, and stories of what people had found for native insects. The group particularly liked the displays of the Emerald Ash Borer and Asian Longhorned Beetle.

In the afternoon this group ventured to Cushman Preserve where the Hemlock Woolly Adelgid has been found and where beetles have been released as a biological control. The exact location of the infested hemlock trees was not known, however the group stopped at several hemlock trees to look for the adelgid and found none, which was an encouraging sign that the biological controls were effective. Morten Moesswilde, Maine Forest Service District Forester, joined the group for the walk and answered several questions, which included: “how do I manage my woodlot if I find the adelgid”, general questions on invasive insect and plant species, and other forestry questions.

The 3rd workshop was held on April 19th at the Searsmont Town Office. This workshop was promoted in both Waldo and Knox Counties and Mary Thompson served as the presenter. The workshop just had 4 participants. A workshop summary and evaluation forms were not made available for this workshop. The 4th workshop was held on May 4th at the Bath City Hall in Sagadahoc County. There were eleven participants at the workshop. Three attendees registered for State of Maine BPC credits. One person requested credits for the International Society of Arboriculture. The audience had a variety of interests and backgrounds. Some of the organizations that were represented at the workshop were the Maine Coast Heritage Trust and the City of Bath. Others in the room were private landowners, foresters, land trust members, pesticide applicators, and interested individuals.

Mary Thompson gave a very informative yet practical presentation at an easily understandable pace. The focus was on the major risks to Maine’s forests due to forest pests. She made a point to identify which insect invaders were present in the Bath area, especially the browntail moth. The workshop did not have too many questions or much discussion until the group went over to Oak Grove Cemetery to look at browntail moth larvae and nests. Kyle Rosenberg, City of Bath Arborist talked about how the City of Bath is trying to manage these insects and the steps that someone could take if they found browntail moth on their property. The City of Bath TV station was there and Stephen Marois filmed the presentation. Overall, the workshop was a success. Evaluations showed satisfaction from audience. The noted strong points were: insect visuals, the presenter’s knowledge, and the prevention, detection, and identification of these insects. The workshop goers said that they will be able to use the skills learned to identify pests, evaluate their own and properties assessed for work, and having a better preparedness for the insects. The only suggestion from the audience was for future pest workshops to include a bit about woodlot management, which was also suggested at the Somerset County Workshop.
Mary Thompson, Knox-Lincoln SWCD Conservation Technician has served as a presenter for several of the Invasive Forest Pest Workshops and Trainings in Maine in 2016. Mary previously worked as a USDA Natural Resources Conservation Service District Conservationist. In these above photos Mary is leading a workshop at the Midcoast Conservancy in Wiscasset Maine that was hosted by the Knox-Lincoln SWCD in partnership with the Small Woodland Owners Association of Maine, the Pemaquid Watershed Association and the Midcoast Conservancy.

A representative from a local land trust examines the invasive forest pest display information at the workshop at the Midcoast Conservancy on April 6, 2016. Land trust representatives in Maine are bringing the workshop information back to their members so that they can be educated and keep a watchful eye out for invasive pests that threaten the forestlands.

Maine Forest Service District Forester in Lincoln County, Morten Moesswilde, answers questions about invasive forest pests at a field session at 147 acre Cushman Preserve owned by the Chewonki Foundation where the Hemlock Wooly Adelgid has been found, although no presence of this pest was detected on the day of the workshop.
Browntail moth infestation at the Oak Grove Cemetery in Bath Maine, as shown by City of Bath Arborist Kyle Rosenberg during the Sagadahoc County SWCD Invasive Forest Pest Workshop on May 4, 2016.

On the left, Patty Cormier, Maine Forest Service District Forester, and on the right, Somerset County SWCD Executive Director, lead an Invasive Forest Pest Workshop in Skowhegan, Maine on May 5th.

Maine Natural Areas Program staff Nancy Olmstead, Biologist and Mary Yurlina, Botanist explain about the threats posed by invasive plants as well as invasive pests during the Invasive Forest Pest Workshop in Skowhegan, Maine on May 5th.
5. Additional Outreach Events

Two additional invasive forest pest outreach and education events were held during this grant quarter. Franklin County SWCD set up a display at the Town of Farmington’s Earth Day Celebration on April 22nd. Next to this display was a related display set up by Patty Cormier, Maine Forest Service District Forester, that focused on both invasive pests and plants. This was a small event and approximately 12 people visited the display set up at the Pierce House in the center of town. Several people took handouts, noting that they were interested in information that they could take home with them.

Municipal outreach was provided during the Maine Chapter of the Public Works Association’s 25th Annual Highway Congress held at the Skowhegan Fairgrounds on June 2nd. The Highway Congress typically draws over 1,000 professionals from approximately 100 towns and agencies in Maine, and the professionals that participate in this event typically work to maintain local and state roads, as well as the Maine Turnpike and Right of Ways throughout the state. These are managed through municipal public works departments and the Maine Department of Transportation. These professionals are a very high priority target group given that they work outdoors throughout all regions of the State of Maine.

Dual booths were set up side by side to focus both on invasive forest pests and also invasive terrestrial and wetland plants and were staffed by representatives from the Maine Forest Service and from Maine SWCDs. Representatives from the Maine Forest Service included Entomologist Colleen Teerling and Technician Waynes Searles, who primarily focused on providing information about the Browntail moth. Representatives from Kennebec, Knox-Lincoln and Somerset SWCDs also provided information to participants.

An engaging Time Out for Training educational activity, presentation and quiz that was approximately 5-10 minutes duration was given to several participants at a time. This was designed to be able to educate 10-12 people at a time. When participants finished this activity and quiz they received a participation stamp to certify that they took part in this training station. Approximately 150 and 200 people throughout the day visited the display. There were times that they had about 20-25 people at the booth at one time. The Time Out for Training seemed very effective given its goals.

6. Evaluation and Assessment Metrics

Dale Finseth, Kennebec County SWCD Executive Director, developed a table to use for this grant project. The table/metric that Dale designed and is used with the Technical Delivery Team provides monthly data regarding the project’s public contacts and outreach activities. This metric documents all education and outreach activities. Specific "workshop data" is part of the metric, and enables the project to track specific activities in addition to cumulative estimates of the resulting public effectiveness of the efforts. In addition, all workshop events will include evaluation forms in order to determine the effectiveness of the presentations and collect suggestions for further activities. To date, approximately 180 people have participated in 9 organized workshops and hundreds have stopped at booths at 6 fairs, trade shows and other large events. Outreach has been primarily targeted to landowners interested in conservation and stewardship and to a wide range of professionals that all work outdoors thereby creating an effective first line of detection to mitigate the spread of invasive forest pests in Maine and to keep our forests healthy for now and for future generations.
1. **Press Releases and Additional Media**

Conservation districts in 4 counties coordinated invasive forest pest workshop and event information for 4 events held from July 1, 2016 through September 19, 2016. As three of these events were at fairs, promotion for these events was provided through the fairs themselves and through the conservation districts promoting their invasive forest pest information displays and booths. One event was a talk and tour in Unity, Maine in Waldo County. This tour focused primarily on invasive plants, however part of the tour and discussion centered on invasive pests. This tour was promoted through the national Morning Ag Clips, the Maine DACF, the Portland Press Herald, and the Waldo Republican Journal.

2. **Website and Facebook Posts**

The social media outreach for this grant project was continued through conservation districts and through our partners, with increased emphasis on partnering with the Maine Natural Areas Program and the Maine Forest Service and on combining information displays and presentations to include both invasive pests and plants that threaten our forests in Maine. Conservation districts, the Sebasticook Regional Land Trust and the municipality of Unity, Maine promoted the talk and tour on their websites and Facebook pages.

3. **Workshops Held with Conservation Partners**

A workshop was held in Unity in Waldo County on August 12th. Sixteen people attended the Talk and Tour Invasive Plant Workshop hosted by the Waldo County Soil and Water Conservation District and co-sponsored by the Sebasticook Regional Land Trust. Continuing education credits were not provided for this workshop. Ecologist Aleta McKeage opened the workshop with a short presentation on the most common invasives currently found in the area. A discussion was also held on the effect invasive diseases and insects are having or the potential danger they pose to Maine’s forestland. When asked by a workshop participant what the definition of an invasive was, McKeage said, “An invasive species is one that reduces ecosystem health and diversity and degrades wildlife habitat, or causes problems in terms of land management goals.” McKeage commented that sometimes invasives win despite our best efforts, but their damage can still be reduced. "We can always work to control rather than eradicate, managing the land intensively, and we can apply our ingenuity and work together over many years to solve the problems," she said. “However, the first and most important measure is to be watchful and act quickly when finding any invasive species before they get a strong foothold, whether it be terrestrial or aquatic plants or invasive insects or diseases that will threaten our natural habitat here in Maine.
4. Outreach Displays and Information Booths at Fairs

Invasive forest pest outreach and education was provided through 3 fairs in Maine during this grant quarter. Oxford County Soil and Water Conservation District (OCSWCD) set up an educational display at the Ossipee Valley Fair that Jeannie Federico, OCSWCD Education and Outreach Coordinator, staffed from July 7th through 10th in South Hiram in Oxford County. This outreach was particularly critical due to Emerald Ash Borer outbreaks in the adjacent county to the west in New Hampshire. Although Ossipee is a small fair they are perched on the corner of York, Cumberland and Oxford Counties within miles of the New Hampshire border and the Emerald Ash Borer (EAB) outbreak in 4 counties in New Hampshire very close to the Maine border. Many in this area feel they’ve seen EAB already but, as yet, there have been no actual pest sightings to report or act on. In the course of this 4 day fair the Oxford County SWCD connects with approximately 800 to 1000 people and they are comfortable asking for new information and updates. This was Jeannie’s third year at Ossippee Fair, the first two working with the previous DACF forest pest coordinator, Lorraine Taft.

Jeannie Federico has served as the OCSWCD education and outreach coordinator since 2010. Teaching people about the threats of invasive forest pests has been a major focus for the OCSWCD. Oxford County borders New Hampshire and encompasses many recreation and camping areas. This is also a major route for the logging industry, which puts Oxford County at risk of being some of the first in Maine to see the EAB. Jeannie shares a powerful message of the lessons learned from those states that have already been damaged by these invasive pests, in addition to all the research now being done to slow their spread.

Knox-Lincoln Soil and Water Conservation District (KLSWCD) set up a display at the Union Fair in Union, Maine from August 20th through August 27th. This fair is one of the oldest fairs in Maine and attracts tens of thousands of people each year. For the past several years the KLSWCD has featured a booth with an educational display centered on invasive threats in Maine, with this year’s information focused exclusively on invasive pests. Knox and Lincoln counties have 398,300 acres of forestland that provides habitat for a diversity of plants and animals, protect water resources, and provide logging and farm income. Hemlock wooly adelgid is recently established in both Lincoln and Knox counties, providing a great opportunity to educate residents and help contain these pests and stop their further spread.

The Kennebec County Soil and Water Conservation District teamed up with KLSWCD to provide invasive forest pest and plant education and outreach at the Maine Farms Days at Misty Meadow Farm in Clinton, Maine in Kennebec County from August 24th through August 27th. Additional partners for this outreach included the Maine Natural Areas Program and the Maine Forest Service that were providing invasive pest education and outreach through a USDA Natural Resources Conservation Service Conservation Innovation Grant.
5. **Year End Summary**

The Scope of Services provided by the MACD Employees Committee Technical Delivery Team in this first year of the Maine Department of Agriculture, Conservation and Forestry Invasive Forest Pest Outreach
and Education Grant was in accordance with the goals and plans outlined in the DACF Maine Forest Service’s Maine State Forest Assessment and Strategies of June 18, 2010. As noted in this publication, “MFS has identified several critical and interrelated challenges that are key to the future of our forests: Keeping our forests as forests for the long-term – this is fundamentally important. A number of exotic insects and diseases, some established, some not yet here, threaten significant components of Maine’s forests.”

The MACD Employees Committee convened and trained a Technical Delivery Team to provide education and outreach throughout 12 counties in Maine. The Technical Delivery Team utilized a three-pronged approach for this outreach developed by Jean Federico of the OCSWCD to provide for cost efficient and effective outreach and education. Care was taken to present concepts in a straight-forward and scientifically sound manner.

The 1st prong was events, such as walk and talks and workshops. Eleven Technical Training Workshops were held in 7 counties in Maine in partnership with the Small Woodland Owners Association of Maine, who co-sponsored most workshops, and in conjunction with several land trusts, conservation organizations and municipalities. The MACD Employees Committee grant Work Plan goal was to offer Technical Training Workshops in a minimum of 7 counties. All of these events targeted outreach to local landowners, and to forestry professionals, such as arborists, landscapers and foresters.

The 2nd prong was fairs, with a goal of at least 8 fairs in the target counties having invasive forest pest displays and handouts. The committee was able to provide displays and handouts at 8 large events in 5 counties this past year, from fairs to trade shows to other community events. Some of this was at the very beginning of the grant period and was provided as match to this grant, with no formal documentation provided, such as the Oxford County Fair and the Farmington Fair in September, 2016. Additional fairs and events included the State of Maine Agricultural Trade Show in Kennebec County, the Sportsman’s Show in Penobscot County, the Earth Day Celebration in Franklin County, the Knox-Lincoln Plant Sale at the Union Fairgrounds, the Ossippee Valley Fair in Oxford County, the Union Fair in Knox County, and the Maine Farm Days in Kennebec County.

The 3rd prong was municipal outreach. Although this differed from the original work plan, outreach was provided in partnership with several local municipalities throughout the grant period. There were also representatives from municipalities at several of the workshops. The largest municipal outreach was provided during the Maine Chapter of the Public Works Association’s 25th Annual Highway Congress held at the Skowhegan Fairgrounds in Somerset County. The Highway Congress typically draws over 1,000 professionals from approximately 100 towns and agencies in Maine, and the professionals that participate in this event typically work to maintain local and state roads, as well as the Maine Turnpike and Right of Ways throughout the state. These are managed through municipal public works departments and the Maine Department of Transportation. These professionals are a very high priority target group given that they work outdoors throughout all regions of the State of Maine.

Campground outreach was not as extensive as we would have liked for the first grant year. However, outreach was provided through the Maine Campground Association. A database of all campgrounds in Maine was developed and additional outreach will be provided to campgrounds in the next grant year.

The MACD Employees Committee was extremely pleased to receive regional, statewide and national coverage through press releases and social media outreach published throughout the grant period that brought attention to the threat of invasive forest pests in Maine. The partnerships that were built and strengthened during this grant project will continue to provide coordinated opportunities for invasive forest pest education and outreach in the next grant year and beyond. Together with our conservation partners we are committed to educating people about our forest resources, threats and management strategies in order to protect and sustain these resources for now and for future generations.