Heather Darley

Assistant Invasives Program Coordinator

2016 Progress Report and Accomplishments

Southern Pine Beetle Monitoring Project – Recruitment and Coordination

In May and June, the LHPRISM participated in an effort to monitor for Southern Pine Beetle (SPB), an invasive insect emerging in our area. 15 volunteers were trained and assigned to check 12 SPB traps located throughout the region. Coordination of this monitoring project involved working with Jessica Cancelliere and Tom Schmeelk at the NYSDEC to train our volunteers at a workshop held at Bear Mountain and get them set up with the supplies they needed to check their assigned traps. Each volunteer needed to be equipped with a SPB infestation identification guide, a bottle of non-toxic antifreeze, a bottle of ethanol, an Android device (if they didn't have one), sets of frozen lures, paint filters, and sample bags for each trap. We did not have all the monitoring materials at the time of training, so there was a little extra effort to make sure our volunteers had everything they needed. We also had to find and borrow deactivated Android devices for our volunteers to use to log their trap visits using an application developed by the NYSDEC.

There were three traps located at Bear Mountain, five traps at Minnewaska, and one trap located at Schunnemunk Mountain, Hudson Highlands, Huckleberry Ridge, and Roosa Gap. The SPB traps needed to be checked every two weeks, and lure changes had to be done every other trap check. Two volunteers were assigned to each location, and their trap checking shifts alternated between the two volunteers. A few of our volunteers had some difficulty with locating their traps, so we were in constant communication about working together to find the traps!

Overall, the SPB monitoring project was a success. The monitoring effort was a total of 174 volunteer hours that contributed to the detection of SPB at Bear Mountain, Schunnemunk, Roosa Gap and Minnewaska. After SPB was found in traps at Bear Mountain and Schunnemunk Mountain, we recruited volunteers to search for the infested trees. No infested trees have been found in these two parks yet.

Taught an ISF Introduction to Plant Identification Workshop

On July 23rd, I taught an Introduction to Invasive Plant Identification Workshop at the Trail Conference Headquarters in Mahwah, NJ. This 7-hour workshop covers the identification of our 12 phase 1 invasive plant species, survey protocol, and how to operate a GPS unit. There were 6 new ISF surveying volunteers in attendance.

Assisted in Phase 1 and Phase 2 workshops

Linda Rohleder taught two Phase 1 and one Phase 2 invasive plant identification workshops that I assisted in teaching. This involved prepping learning materials, setting up the workshop space with live

samples of the invasive plants, and helping with the functioning of the workshops. I assisted in teaching surveying volunteers how to operate GPS units.

Coordinated ISF Surveyors & Process Incoming Data

A large part of the spring and summer assistant responsibilities were dedicated to getting our Invasives Strike Force volunteers set up with their survey assignments. This involved contacting our volunteers, sending them a survey about what parks they'd like to work and hike in, and then finding them an trail segment assignment that suited their needs (both geographically and based on their physical limits.)

Periodically throughout and at the end of the season, I checked in with our volunteers to see if they had everything they needed to complete their survey and if they had any questions or concerns about their assignment. Then at the end of the season, I handled the incoming data and making sure that we received all the data our volunteers collected for us.

BlockBuster Survey Program

Workshop Preparation

In preparation for our 7 BlockBuster Survey workshops, we made copies of all the materials our surveying volunteers would need to complete their assignments. This included identification guides, sets of the 4 types of survey sheets, protocol guidelines, and instructions for the Avenza PDF Maps application.

Attended and Assisted with Training Workshops

I attended three of the BlockBuster training workshops to help our trainers teach our volunteers about how to operate a GPS unit/use the Avenza PDF Maps application. I also attended these workshops to deliver the survey materials that we had prepped for the workshops. We also needed to collect and process volunteer information for our 116 survey volunteers. At the workshops I attended, it was also my responsibility to assign blocks to our volunteers.

Assignments (Map and GPS Setup)

Before each workshop, I was in contact with all of our signed-up volunteers to make sure they were set up with the Avenza PDF Maps application, so that we could teach them how to use it at our workshops. After our volunteers were assigned blocks at our workshops, there was also follow up to send everyone a link to access a PDF map of their assignment to either upload to their phone or print out, should they have needed another copy. I assisted our volunteers in uploading the PDF map into their phone (which turned out to be very tricky!)

Assisted Surveyors (with Protocol, ID, etc)

I was also in constant contact with our volunteers who struggled with the survey protocol and plant identification. This communication was also recorded as feedback when we go to improve next

year's protocol. I often would have phone conversations with our volunteers to make sure they were on the right track and had everything they needed.

Helped Process and Validate Incoming Survey Data

Towards August and September, it came time to collect all the data our volunteers worked so hard to collect! There were four survey components to keep track of for each block assignment, and also a few different ways for this data to be submitted. The four survey components to be submitted were survey data sheets, GPS coordinates, survey photos and volunteer time record. There are four different types of surveys to be taken with the BlockBuster Survey program, and 3 different ways to submit these sheets: online via Survey Monkey, via mail, or via scan and email. The surveys submitted via Survey Monkey all needed to be exported from the website individually and the files saved to their block folders in the Trail Conference server. GPS coordinates could be submitted by mailing back the GPS unit borrowed from the Trail Conference, emailing in coordinates exported from Avenza PDF Maps or writing the full coordinates down on their survey sheets.

Survey photos could be submitted via emailing in the files or attaching the photo to the specific coordinate marked in Avenza PDF Maps; the photo would then have to be exported individually from the KML file. Survey photos were only required if a surveying volunteer encountered a Group 2 Species. The volunteer time record was a total of the hours our volunteers spent on their block assignments; this total included prep, travel, hike, and survey time.

Assisted in LHP Event Publicity

Part of my assistant responsibilities are to post any LHP partner-hosted events or invasives-related events to the LHP website calendar. I also participated in the Publicity Committee in efforts to plan to promote our efforts and events.

Assisted in Planning and Running of LHP Partner Meetings

I helped to plan and prep materials for LHP partner meetings. This involved making nametags, collecting outreach materials, taking meeting notes, and logging attendance.

Gave Presentations on SPB and BBS Projects

At Partner Meetings, I gave brief overviews and updates about the Southern Pine Beetle Monitoring project and the BlockBuster Survey program.

Helped with LHP Annual Report

I assisted in collating partner final reports and quarterly metrics and worked these elements to form a cohesive Lower Hudson PRISM final report.

Conducted Inventory of TC GPS Units

I helped to prep the GPS units before the survey season by making sure all units were functional, had the correct operational settings, and that all necessary materials were included with the unit. I kept an inventory of the Trail Conference GPS units. This involved assigning and distributing units to volunteers who needed them, making sure the borrowing agreement paperwork was filled out, and ensuring that all units were returned at the end of the survey season.

Coordinated ATC Rare and Endangered Plant Monitors

For our ATC Rare and Endangered Plant Monitoring program, I organized the training workshop, and Linda Rohleder taught our volunteers how to monitor for their rare plant assignments. I prepared the assignments by extracting the species-specific data for each site from the report provided to us by the Appalachian Trail Conservancy. I then had to create maps for each volunteer based from this report. Each rare plant monitoring volunteer had to be provided with a volunteer service agreement, monitoring forms, and information about their assignment. We had 13 volunteers searching for 18 rare and endangered plants at 8 different sites along the Appalachian Trail.

Processed and Submitted Survey Data

I was in contact with our volunteers after they had completed their monitoring assignment to help them submit their monitoring forms and data. I ensured that the monitoring forms were filled out completely, that any coordinate data or photos were attached with the forms. The forms were then scanned and emailed to the Resource Program Manager at the Appalachian Trail Conservancy.

Recruited ISF Interns/Volunteers

On October 20th, I spoke with an environmental studies class at Ramapo College with the intent of recruiting volunteers and interns to assist with the invasives program. Cliff Berchtold and I also gave a presentation about the Invasives Strike Force at the Trail Conference Open House.

Assisted in Finalizing and Mailing ISF Trip Reports

Our ISF Crew Leader wrote all of the ISF Trip Reports, and I helped in the effort to send them to all of our partners and trail chairs involved in the removal efforts. This involved finding and organizing addresses, printing reports and keeping an inventory of what had been and also needed to be sent out.

Partner Survey Follow-Up

I made phone calls to collect partner survey responses for our ISF Trip Reports so that the surveys could be included on our Americarps final report.

Writing LHP and ISF Monthly Newsletters and Survey Follow-Up Reminders

I wrote monthly newsletters, one which went out to our ISF volunteers and another which went out to our BlockBuster Survey volunteers. The newsletter that went out to our ISF volunteers included ISF Trail Crew outings, local invasive and native plant events, and updates on projects to recruit volunteer help.

Writing Articles on ISF and LHP Projects for TC Trailwalker

I wrote two articles about our invasives program's efforts for the Trail Conference's quarterly newsletter. The first article was about the LHP Southern Pine Beetle monitoring project, and the second article was an overview of our season spent fighting invasives.

Reporting DWG Hours to NPS

The National Park Service requires that any volunteer time completed by our volunteers within their parks be reported to them each month. A handful of our volunteers worked in at the Delaware Water Gap National Recreation Area, so volunteer time logs had to be reported for their work in July, August and September.

ISAW Events Posting for LHP Calendar

For the New York State Invasive Species Awareness Week (ISAW), I was in contact with the ISAW Coordinator and our LHP partners holding events during that week to make sure that all our events were posted on the calendar and advertised to the public. Preparation for ISAW involved a few conference

calls with the ISAW Coordinator and soliciting our partners to make sure we were promoting any invasives-related events being hosted in the Lower Hudson PRISM for that week.

Sent Out ISF Trail Crew Volunteer Work Day RSVPs and Reminders

I assisted in promoting our Invasives Strike Force Trail Crew volunteer work days/removals by sending out RSVP requests to our ISF Trail Crew mailing list two weeks before the event and then a reminder the week before the event. I was also in contact with our volunteers who indicated they'd like to attend, and with the help of our ISF crew leader, I provided our RSVP'ed volunteers with details about the day, directions, and meeting place.