DATE & TIME: Monday, May 13th, 2021, at 6:00 p.m.

LOCATION: Conference Room 2C, 2nd Floor, City Building One Donham Plaza
Join Zoom Meeting: Zoom Meeting Link
Meeting ID: 821 8784 0953
Passcode: 214229
Phone Information: +16465588656
ID: 82187840953#,,,,,*214229#

MEMBERS: Irene Earl Carolyn Keiffer Steve Lewis
Travis Bautz Adam Johnson
Ami Vitori, City Council Representative
Doris Roberts, Keep Middletown Beautiful Liaison
Alison Manning, Staff Representative

1. MEETING CALLED TO ORDER
2. ROLL CALL
3. APPROVAL OF MINUTES – March 8th, 2021 and April 12th, 2021
4. AUDIENCE COMMENTS – RESERVED TIME (3 MINUTES PER SPEAKER)
5. OLD BUSINESS
   − Urban Forestry Topics: Tree Removal Report
   − Buckeye Yard and Garden onLine, https://bygl.osu.edu/
   − Tree City USA Follow-Up
   − General Tree Comments
6. NEW BUSINESS
   − Youth Baseball Discussion with Mr. Schwarber and Berachah Church
   − Parks Maintenance Update – Monthly Report for April
   − Council Presentation Follow-Up
   − Earth/Arbor Day Follow-Up
   − Parks Master Plan Update
   − Non-Voting Liaison Requirements
7. COMMENTS – RESERVED TIME (5 MIN. PER SPEAKER) Board Members, Liaisons, Council Members
8. OTHER
9. ADJOURNMENT

The next regular meeting of Park Board will be held on
Monday, June 10th, 2021 @ 6:00 p.m.
<table>
<thead>
<tr>
<th>TYPE</th>
<th>REGULAR MEETING</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLACE</td>
<td>CONFERENCE ROOM 2C, 2ND FLOOR, CITY BUILDING ONE DONHAM PLAZA</td>
</tr>
<tr>
<td>PARK BOARD MEMBERS</td>
<td>TRAVIS BAUTZ, IRENE EARL, ADAM JOHNSON, CAROLYN KEIFFER, STEVE LEWIS</td>
</tr>
<tr>
<td>COUNCIL REPRESENTATIVE</td>
<td>AMI VITORI, NOT PRESENT</td>
</tr>
<tr>
<td>LIAISONS</td>
<td>DORIS ROBERTS OF KEEP MIDDLETOWN BEAUTIFUL, PRESENT</td>
</tr>
<tr>
<td></td>
<td>ALISON MANNING CITY OF MIDDLETOWN STAFF REPRESENTATIVE, PRESENT</td>
</tr>
<tr>
<td>MEETING</td>
<td>CALLED TO ORDER AT 7:06 P.M.</td>
</tr>
</tbody>
</table>

**ROLL CALL:**

- TRAVIS BAUTZ, IRENE EARL, ADAM JOHNSON, CAROLYN KEIFFER, STEVE LEWIS

**APPROVAL OF MINUTES**

Mr. Johnson motioned to table the approval the minutes from the February 1st, 2021 meeting, Dr. Keiffer seconded. None opposed. Motion passed.

**INTRODUCTION OF NEW BOARD MEMBERS**

Ms. Manning introduced Mr. Bautz, as the newest appointed Park Board Member. Mr. Bautz told the board about himself and his interests. He stated that he’s not a Middletown resident and is Executive Director of the MidPointe Library System and his office is in Middletown. He added that he is happy to be on the board and wants to help in any way he can. The Board welcomed Mr. Bautz, and thanked him for applying.

**AUDIENCE COMMENTS**

No audience comments.

The Board welcomed former Park Board member Jason Jones to the meeting. Mr. Jones was presented with a certificate of appreciation for Outstanding Community Service, signed thank you card, and gift card. Ms. Manning welcomed Mr. Jones back anytime and reminded that there were vacant non-voting liaison positions.

Ms. Earl expressed that she will miss him at the meetings. Mr. Lewis stated that he couldn't say enough for Mr. Jones' dedication. He stated “you know, when we converted the baseball diamonds over to the soccer field, changed tree commission into park board, he got it right in the middle of the fire. He handled it so well. It may seem like little things but it's very important because his name, all our names are out there, we are appointed officials. I always appreciated Jason’s what he considered to be his lack of knowledge on some of these topics that we all deal with ourselves deal with every day in our line of work, I always appreciated that he gave a very honest view especially from a tax payer standpoint of how money was being spent or for this particular group not being spent. But I appreciate him for his friendship and I think he did an honorable job. We don't know who are going to nominate for president now, but deeply appreciate everything you’ve done”.

Ms. Manning explained that Mr. Jones has been Chairman of the Board since his second year being on the board. That Mr. Lewis was the first ever to nominate Mr. Jones, followed by Ralph Connor, and then Dr. Keiffer for every year following until last year. Dr. Keiffer stated that Mr. Jones could be the emeritus to the board.

There were no additional comments.

**OLD BUSINESS**

**URBAN FORESTRY DISCUSSION**

**Tree Removal Report 2020**

Ms. Manning distributed and digitally shared the current tree removal report. She noted that these were the trees removed for the year currently. She stated that since last month the only additional tree was a maple that fell into the right-of-way along Yankee Road. Dr. Keiffer noted that it was less than normal considering the windy conditions of the month and felt that was good.
Ms. Manning distributed and digitally shared a handout from the BYGL. The handouts included information about witch-hazel describing its culture, habit, flowering, fruit, and cultivars and hybrids.

Dr. Keiffer asked if the City would be planting trees this spring. Ms. Manning responded that they are postponing spring plantings. She explained that because of budget constraints less seasonal employees will be used this year. She stated that there may be an Arbor Day planting but that instead of a large spring planting she would like to try to organize a tree give-away for the community and plant an Arbor Day tree this fall. She said that she wants to be considerate of staffing capabilities and what a dry season could represent for watering responsibilities. She expressed that she wanted to keep existing and newly planted trees healthy rather than continue to plant new trees and sacrifice maintenance.

There was a short discussion about the possibility of student internship availability. Dr. Keiffer explained that if the opportunity offered hands on learning students are interested in the internship even if it is not paid, that the regional campuses put funding aside to offer up to $1000 as payment for non-paying internships. She said students would be available May to August. Ms. Manning said she would think about the opportunities that might be available with the City. Dr. Keiffer said she would write something up to distribute for review.

Ms. Manning asked the Board what their opinion and perspective is regarding netting used to protect trees. She explained that she found a couple of different alternatives of netting and matting but expressed concern about the cost of the protection. There was a discussion about the advantages and disadvantages of different types of materials. Mr. Lewis expressed concern about materials laying on the plant itself or acting as a sail in wind and damaging plant materials.

Mr. Lewis said he agrees with the general perspective that its nature’s way of pruning. He stated “It’s nature’s way of pruning, you might as well figure that they’re going to be affecting the first or last year, second year, and some of the third-year growth when they do what we call flattening. That is when they’ll be piercing the wood and inserting their things. And what I’m telling people is it’s nature’s curriculum, and we’re going to come back next year. And then we’re going to have a banner year of dormant pruning because there’s going to be a lot of dead affected limbs on these limbs on these plants.”

Ms. Earl asked if the materials break down over time. There was a short discussion about what the barrier material does and that one states, “it lasts two seasons”. Dr. Keiffer expressed concern about the capabilities and time-consumption incurred with large rolls of materials versus individual bags or netting. Ms. Roberts stated that it would have to be anchored and the anchoring would have to not rub the bark and cause damage.

Dr. Keiffer discussed some of her previous experience with using netting. She explained that there was some crown damage and she had been looking for other types of protection that would protect the crown more and be more economical.

Mr. Lewis asked if Ms. Manning had reached out to Wendi VanBuren, with Ohio Department of Natural Resources’ Division of Forestry, to see what other municipalities had been doing. Ms. Manning said she planned to ask that when she meets her to receive the community’s Tree City package.

Ms. Roberts stated that 17 years ago, nothing was done and there wasn’t large damage. Dr. Keiffer suggested that maybe trees in highly visible areas or trees that are expensive should be covered.

Ms. Manning said she would go ahead and reach out to Wendi and go from there. Dr. Keiffer stated that whatever was used, it would be nice if it had dual use for something else as well.

Ms. Manning asked Mr. Lewis if he was wanting to write a post to provide more information about the topic since he had mentioned it in the last meeting. She also asked if he wanted her to reach out to ODNR to see if there is something available to use. Mr. Lewis said he felt that it would be beneficial to do and that attending a council meeting would also be advantageous. Ms. Manning said she would work on something to put out. There was a short discussion about the recommendations of delaying planting and covering the trees. Ms. Manning said she would find out more about what other municipalities are doing and the Board could organize something from that point.

Ms. Earl asked if this information could be incorporated with the Earth Day/Arbor Day celebration. Mr. Lewis asked what was planned for the event this year. Ms. Manning said she was supposed to meet with Jeff Michel later this week and Ms. Roberts said there is a Keep Middletown Beautiful meeting March 17th.

Ms. Manning noted that all members should have received a meeting invite for the upcoming stakeholder meeting for the project. The said yes, but that there was a little confusion about the cancellation and rescheduling of the event. She said the date for the meeting is March 23rd. Mr. Bautz stated that he didn’t receive one. Ms. Manning said she would check and make sure to send him the
Ms. Manning explained that the Board could bring those forward. She explained that this location was identified as an area in need and that multiple locations were considered. Ms. Roberts asked if the Central Avenue fire station would be closed. Ms. Earl stated that she though it was “browed out” and just occasionally staffed. Ms. Manning said she didn’t know any details about which fire stations would remain open, if any were to be closed, and what the staffing details are of the current fire stations. Ms. Earl asked if Dowling Park is a high-use park. Mr. Johnson said he drove by earlier and there wasn’t anyone there. Ms. Manning said that the park is used occasionally, and that the school utilizes it sometimes. That the detention basin takes up a large portion of the park. She said that none of the amenities, including the basketball court and playground, shouldn’t be impacted by the proposal. Ms. Manning said she felt there was some concerns expressed about if the senior citizens levy is still needed.

Ms. Manning explained that she hopes that if there are any concerns or questions about the levy a “City Manager Update” was posted onto social media and possibly the City’s website providing a better explanation. There were some concerns expressed about if the residents would have to approve the levy, but that she wasn’t sure if residents would have the say in the passing of the levy, but that she wasn’t sure if residents would have to approve the new project. Ms. Manning said some to impact the park minimally, and that the project is dependent on a proposal. Ms. Manning said she felt some of these questions would be addressed as the levy became more of a hot topic closer to voting season. Mr. Jones said he though it would be a good opportunity for the improvement of the park.

Ms. Manning explained that “we’re taking what information we have from the City’s Comprehensive Plan to make the plans a collaborative effort and make them as cohesive and supportive as possible. Mr. Johnson, Ms. Earl seconded the motion. Mr. Johnson accepted. Dr. Keiffer stated that she would be retiring from December, including from all boards.

Ms. Manning opened the floor for Chairman nominations. Mr. Lewis nominated Mr. Johnson, Ms. Earl seconded the motion. Mr. Johnson accepted. Dr. Keiffer moved to close nominations, Ms. Earl seconded the motion. All voted in favor of the nomination.

Ms. Manning opened the floor for Vice Chairman nominations. Mr. Johnson nominated Mr. Lewis, Dr. Keiffer seconded the motion. Mr. Lewis accepted. Ms. Earl moved to close the nominations, Ms. Earl seconded the motion. All voted in favor of the nomination.

Dr. Keiffer stated that she would be retiring from December, including from all boards.

Ms. Manning opened the floor for Chairman nominations. Mr. Lewis nominated Mr. Johnson, Ms. Earl seconded the motion. Mr. Johnson accepted. Dr. Keiffer moved to close nominations, Ms. Earl seconded the motion. All voted in favor of the nomination.

Ms. Manning opened the floor for Vice Chairman nominations. Mr. Johnson nominated Mr. Lewis, Dr. Keiffer seconded the motion. Mr. Lewis accepted. Ms. Earl moved to close the nominations, Ms. Earl seconded the motion. All voted in favor of the nomination.

Ms. Manning gave a friendly reminder of the requirement. She said that the ordinance can be revised if there was a desire. Ms. Roberts asked if board members could also serve as non-voting liaisons. There was a discussion about the requirements of the ordinance and charter, and possible candidates for the positions. There was a general consensus from the Board that the need of these non-voting liaisons should be reviewed and possibly removed from the ordinance.
Dr. Keiffer said she noticed some discussion on a neighborhood community group forum about a dog park. She asked if there was any discussion happening within the City about a dog park separate of the Parks Master Plan. Ms. Manning said that she didn’t know of any. Ms. Manning said she would be happy to discuss any questions or concerns from anyone if they wanted to reach out to the City.

Dr. Keiffer asked if there was any development of information about the landing zone discussion for Smith Park. Ms. Manning stated that the park wouldn’t be used, and she hadn’t heard any new developments.

Mr. Johnson reminded Ms. Manning about Tree Commission Academy. Ms. Manning informed the Board that she and Mr. Johnson just finished up their freshman course of Tree Commission Academy. There was a short discussion about the benefits of the activity.

Mr. Lewis welcomed Mr. Bautz and summarized a little bit of the history of the board and the City.

Ms. Earl stated that it would be beneficial to explain who Wendi VanBuren is. Ms. Manning gave a brief description of Ms. VanBuren and the relationship of the City and ODNR. Ms. Manning thanked Ms. Earl for the perspective and reminder.

Mr. Bautz offered that the library could be a distribution point for the survey and could help share the information. Dr. Keiffer asked if the library could help by placing a link on the public computers for people to access the projects website.

Mr. Johnson asked if anyone had any information about a fishing derby from Go-Fish. No one knew any information about the topic. Ms. Manning said opportunities around the Smith Park pond were being looked at as part of the Parks Master Plan.

Ms. Manning stated that board and commission training will be available soon. Ms. Manning said she wasn’t sure if it would be required but thought so, but regardless highly suggested that everyone should attend.

Mr. Lewis said he attended a council meeting and expressed concerns about how the transition of the new Park Board member was handled. He said he also expressed concern about the participation of the assigned council representative and lack of leadership of Park Board. He said he felt the mayor was taken aback by what went on and she stated she would contact him. He said after three weeks he emailed her, and she asked him to reach out the Park Board council representative. He said he would try write a list to give to Councilwoman Vitori of topics he would like to address and his expectations of the council representative.

Ms. Earl explained to Mr. Bautz that the transition was not handled professionally.

Ms. Roberts stated that after the upcoming Keep Middletown Beautiful meeting she would have more information about the upcoming Earth Day/Arbor Day celebration. She also welcomed Mr. Bautz to the board and expressed that she thought there was a great opportunity for collaboration between the City and MidPointe Library. She also asked if the meeting date and time topic could be revisited. There was a short discussion about availability and potential alternatives meeting. Ms. Manning asked if anyone would like to propose a new date or time. Mr. Lewis said he was willing to make one night a month work in his schedule, and just wanted a full quorum consistently. There was a short discussion about the virtual availability and if it would be allowed to continue through June. Ms. Manning said she would double check on the information, but she thought regardless of the ability to continuing to stream virtually, she thought they would have to have three members physically present to conduct business.

Mr. Bautz suggested a doodle pole, and that it might be better than throwing out ideas. Ms. Manning said she would reach out before the next meeting to get more input for potential times and dates.

Mr. Johnson motioned to adjourn, Ms. Keiffer seconded. The meeting was adjourned at 8:12 p.m.
MIDDLETOWN PARK BOARD MINUTES
April 12th, 2021

TYPE
REGULAR MEETING

PLACE
CONFERENCE ROOM 2C, 2ND FLOOR, CITY BUILDING ONE DONHAM PLAZA
ZOOM: MEETING ID: 813 6932 5130, PASSCODE: 6923

PARK BOARD MEMBERS
TRAVIS BAUTZ, IRENE EARL, ADAM JOHNSON, CAROLYN KEIFFER, STEVE LEWIS

COUNCIL REPRESENTATIVE
AMI VITORI, PRESENT

LIAISONS
DORIS ROBERTS OF KEEP MIDDLETOWN BEAUTIFUL, PRESENT
ALISON MANNING CITY OF MIDDLETOWN STAFF REPRESENTATIVE, PRESENT

MEETING CALLED TO ORDER AT 7:04 P.M.

ROLL CALL:
TRAVIS BAUTZ, IRENE EARL, ADAM JOHNSON, CAROLYN KEIFFER
STEVE LEWIS

Dr. Keiffer made a motion to excuse Mr. Lewis, Mr. Johnson seconded. Motion passed.

APPROVAL OF MINUTES
Mr. Johnson motioned to approve the minutes from the February 1st, 2021 meeting, and table the March 8th, 2021 minutes. Dr. Keiffer seconded. None opposed. Motion passed.

AUDIENCE COMMENTS
None.

OLD BUSINESS
URBAN FORESTRY DISCUSSION

Tree Removal Report 2020
Ms. Manning distributed and digitally shared the current tree removal report. Ms. Manning noted that most of the trees removed in March were removed from public rights-of-way. She explained that the high winds caused most of the damage. There were no additional questions or concerns.

Buckeye Yard and Garden onLine
Ms. Manning distributed and digitally shared a newsletter from the Bull’s Run Nature Sanctuary and Arboretum. She explained that the BYGL website was unavailable but still wanted to provide some current tree related information. She gave a brief description of the Arboretum and summarized the newsletter for the Board.

She also included a handout that included links to the Ohio Department of Natural Resources’ Urban Forestry Division and another handout the included information about Project Learning Tree, a program she and Mr. Johnson learned about in Tree Commission Academy.

Dr. Keiffer said she noticed the Earth Day/Arbor Day work day notice in the newsletter for April 17th. She asked if that was Earth Day. Ms. Manning said they have work days scheduled for both the 17th and the 24th. Dr. Keiffer asked the City would be helping with their cleanup. Ms. Manning said she would expand on that more when discussing the Earth Day/Arbor Day event later.

Tree City USA Update
Ms. Manning distributed and digitally shared a letter from the City of Montgomery. She explained that the City of Montgomery was to host the Tree City USA Awards banquet this year but cancelled due to Covid-19. She also notified board members that she spoke with Wendi VanBuren, Ohio Department of Natural Resources Division of Forestry, and has arranged to receive the awards package. She informed everyone that it was the 14th year the City has received Tree City status and its 3rd Growth Award.

General Tree Comments
Dr. Keiffer said she had heard of a new bug attacking the Norway Spruces and she would avoid planting them.

NEW BUSINESS
Parks Maintenance Update – Monthly report
Ms. Manning distributed and digitally shared the monthly report for March. Mr. Johnson asked if Douglass Park splash pad was being repaired. Ms. Manning said she thought it was being repaired but that the damage was extensive, so she didn’t know when that would be complete. Dr. Keiffer asked if the splash pad would be operational for the summer. Ms. Manning said she thought so but was unsure and she would investigate it. Dr. Keiffer asked that the City notify citizens sooner rather than later if the splash pad won’t be working.
Mr. Johnson asked if there was any additional work that could be done so that there aren't issues with the Smith Park splash pad. Ms. Manning explained that regular maintenance is already performed and felt like the issues that do and will pop-up stem from the fact that all items have a life-span and the splash pad features are just showing their age.

Ms. Manning began the discussion about the survey results. She stated that from the input and results Thursdays were available for most of the group. She stated that the second Tuesday or second Thursday of the month, were the most available. Ms. Earl asked what time frame on those days. Ms. Manning stated that the survey indicated majority were available after 5 p.m. but that Ms. Earl was the most restricted because she worked until 7 p.m. and that she was partially the deciding factor. Ms. Earl said she would have to work out her work schedule and asked how long she had left in her term. Ms. Manning said she wasn't sure, but she could find out. Ms. Earl expressed concern about scheduling the meeting around her if she didn't have much longer in her term. Ms. Manning said regardless of the amount left in the term the objective was to find a meeting time that everyone can easily attend. Ms. Earl asked again about the date.

Ms. Manning began the discussion about the survey results. She stated that from the input and results Thursdays were available for most of the group. She stated that the second Tuesday or second Thursday of the month, were the most available. Ms. Earl asked what time frame on those days. Ms. Manning stated that the survey indicated majority were available after 5 p.m. but that Ms. Earl was the most restricted because she worked until 7 p.m. and that she was partially the deciding factor. Ms. Earl said she would have to work out her work schedule and asked how long she had left in her term. Ms. Manning said she wasn't sure, but she could find out. Ms. Earl expressed concern about scheduling the meeting around her if she didn't have much longer in her term. Ms. Manning said regardless of the amount left in the term the objective was to find a meeting time that everyone can easily attend. Ms. Earl asked again about the date.

Ms. Manning began the discussion about the survey results. She stated that from the input and results Thursdays were available for most of the group. She stated that the second Tuesday or second Thursday of the month, were the most available. Ms. Earl asked what time frame on those days. Ms. Manning stated that the survey indicated majority were available after 5 p.m. but that Ms. Earl was the most restricted because she worked until 7 p.m. and that she was partially the deciding factor. Ms. Earl said she would have to work out her work schedule and asked how long she had left in her term. Ms. Manning said she wasn't sure, but she could find out. Ms. Earl expressed concern about scheduling the meeting around her if she didn't have much longer in her term. Ms. Manning said regardless of the amount left in the term the objective was to find a meeting time that everyone can easily attend. Ms. Earl asked again about the date.

Ms. Earl and Ms. Roberts. Ms. Earl said she couldn’t do 5 p.m. but would try to make 6 p.m. work. Dr. Keiffer made a motion to approve the new date and time of future Park Board meetings, the second Thursday at 6 p.m. every month. Mr. Bautz seconded. None opposed. Motion passed.

Ms. Manning distributed and digitally shared a draft of the presentation. She explained that Dr. Keiffer would be presenting about the Tree Commission Academy and that they will be starting their sophomore courses April 21st, that Mr. Lewis will be presenting about Brood X and possibly the Earth/Arbor Day event. Ms. Manning asked if anyone wanted to propose a new date and time. A consensus was reached for a Thursday date. Ms. Manning asked if 6 p.m. was an easy compromise between Ms. Earl and Ms. Roberts. Ms. Earl said she couldn’t do 5 p.m. but would try to make 6 p.m. work. Dr. Keiffer made a motion to approve the new date and time of future Park Board meetings, the second Thursday at 6 p.m. every month. Mr. Bautz seconded. None opposed. Motion passed.

Ms. Manning distributed and digitally shared the survey graphic used for the second Parks Master Plan survey. She explained that the QR Code linked users back to the project survey webpage. She said she thought as of the most recent Friday to the meeting that they had received 219 responses. Mr. Johnson asked if this was in addition to. Ms. Manning explained that this was a separate survey and that the last survey closed with around 230 responses. She said that over 200 high schoolers responded to an abbreviated version of the first survey.

Mr. Johnson stated that a lot of residents just want their streets paved. Ms. Manning assured that the paving levy work will begin soon and she shared it to her neighborhood forum. She said that a lot of people commented that they were thankful for the opportunity to submit input but that some were writing nasty comments stating that the survey was bogus, but that then some commented that the questions asked residents to rank the choices and that you shouldn’t submit more than one top answer. Dr. Keiffer said she felt that if they read it, it was clear, and she was happy to see neighborhood support. Ms. Manning did state that after the first day a change was made to restrict users to having to select one first choice, one second choice, one third choice, and so on. She explained that the change was made to prevent results from being skewed by users selecting all elements as the "most important" or "least important", especially if they weren't interested in the question or park.

She asked that when shared to recommend watching the presentations. She said she had received feedback from soccer user group members, expressing frustration that the City was pushing a concept onto the park without input from soccer. She explained that is not the goal and that the concepts are examples.

Mr. Bautz asked how the Parks Master Plan will be used. Ms. Manning explained that master plan would provide direction not only to council and staff but to residents as well. She said the plan will address funding, programming, design process, and so on giving a successful path of development.

She asked that everyone share as much as possible. Ms. Roberts asked if it was possible for the Middletown Police Facebook page to share. Ms. Manning said that staff has asked them to share as well. She said that many have reached out stating that they had shared including the Middletown Community Foundation and
Mr. Bautz restated that he felt it was a philosophical thing, but he understood charged to use the park if the event is opened to the park. Ms. Manning explained the park and offered again to help possible fund more programs.

Ms. Manning said she felt that the City would be supportive of any programs in municipalities also require a fee. She also explained that a few years ago the City but that staff just needed a correct form filled out.

Ms. Manning apologized that there was an outdated form somewhere on the website and explain that the webpage for special events did have an updated form and that they were sure were the outdated form came from but that it has been removed. She also explained that the event wasn’t rejected or denied but that it had been corrected since speaking with staff.

He explained and described the story time program the MidPointe Library had applied for. He stated that it was a large program to promote literacy that was taking place all over the county and that it was the City of Middletown and Middletown only that wanted to charge a $25 special event permit fee for the Library to tell stories in the park. He said it struck him as odd that a public place would charge a public institution money to use a space for a program that’s open to the public, and that philosophically he has a concern and wanted to know if this was the best approach for the parks. He stated that there’s nothing stopping a group from going to a park and having story time so why would the City charge for another group to do it and that he would think the City would want to know about the event in advance. He said he felt like it punishes those following the rules and doesn’t think it’s right to charge for a space that should be available to the public.

Mr. Johnson asked if the event was a sanctioned event. Mr. Bautz said correct.

Ms. Manning distributed and digitally shared a flyer for the Earth/Arbor Day event. She gave a brief description and notification of the event. There was a short discussion about the activities that take place during the event that included alley clean up, sign post and catch basin painting, tree pruning identification, and code violation identification. Dr. Keiffer asked if tires would be collected the day of the event. Ms. Manning said logistics were still being figured out for the event and said that a tire collection was being considered as a separate event also. There was a short discussion about private versus public property cleanup. Ms. Manning said the City is trying to encourage residents to utilize services already provided instead of preforming the services for them.

Mr. Bautz said he felt that it was counter productive to try to encourage recreation/programming partnerships and charge them a fee to use the parks.

Mr. Bautz explained that he had three talking points he wanted to discuss. The first being that his employee downloaded an outdated special event request form and it was rejected even though it was available on the City website. He said he was surprised there was a wrong form but that it had been corrected since

Mr. Johnson asked if the event was a sanctioned event. Mr. Bautz said correct.

Mr. Johnson said regardless of public versus private sector why should one be charged for an event and not another. Mr. Bautz asked why anyone is being charged to use the park if the event is opened to the park. Ms. Manning explained that part of the fees is when extra services are needed for the event. Ms. Manning apologized that there was an outdated form somewhere on the website and explain that the webpage for special events did have an updated form and that they were sure were the outdated form came from but that it has since been removed. She also explained that the event wasn’t rejected or denied but that staff just needed a correct form filled out.

Ms. Manning stated that the fee has been in place for many years and that other municipalities also require a fee. She also explained that a few years ago the City would waive the fee but that it became an issue about why some where having to pay while others were so a strict policy was adopted to not waive the fees.

Ms. Manning said she felt that the City would be supportive of any programs in the park and offered again to help possible fund more programs.

There was a discussion about the permit requirements specifically about the requirement for each event versus multiple events. Ms. Manning said she would find out more information and follow up with the Board.

Councilwoman Vitori said she understood the fee was to cover administration cost and all the approvals.

Mr. Bautz restated that he felt it was a philosophical thing, but he understood Councilwoman Vitori’s explanation.

Dr. Keiffer agreed that $25 for the program is reasonable but not for each event date. Ms. Manning explained again that it was her understanding that it wouldn’t be for each event date but that she would verify.

Doris asked if it would be the same fee amount for a person that wanted to close an entire block for a block party. Ms. Manning explained that the fee would still be $25 but would include additional fees as stated at the bottom of the application.
There was a short discussion about flexibility of the dates and the annual renewal requirements. Ms. Manning stated that she would get more clarification about the permit and asked if there were any other comments or questions about the topic. There were none.

COMMENTS –
BOARD MEMBERS,
LIAISONS,
COUNCILMEMBERS

Mr. Johnson had no comments, questions or concerns.
Ms. Earl had no comments, questions or concerns.
Dr. Keiffer had no comments, questions or concerns.

Mr. Bautz announced that the MidPointe Library system will be offering shredding services. Saturday, May 1st between 9 a.m. to 11 a.m. in Middletown and Saturday May 8th, 1 p.m. to 3 p.m., in West Chester. Ms. Manning asked if he would like the City to help promote the event. Mr. Bautz said he would send a graphic to be shared.

Councilwoman Vitori offered a possible resource partnership for recreation programming.

There was a short discussion about what programming means. Ms. Manning explained the design and scheduling of a program or activity, not only active but also passive in nature.

Ms. Manning stated that the next meeting would be May 13th at 6 p.m. in Conference Room 2C.

OTHER

None.

ADJOURN

Mr. Bautz motioned to adjourn, Dr. Keiffer seconded. The meeting was adjourned at 8:11 p.m.

______________________________
Board Member

______________________________
Alison Manning –Secretary
<table>
<thead>
<tr>
<th>Location</th>
<th>Type of Tree</th>
<th>Qty. of Trees Removed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Douglass Park</td>
<td>Mulberry, Elm</td>
<td>2</td>
</tr>
<tr>
<td>Sherman Park</td>
<td>Maple</td>
<td>1</td>
</tr>
<tr>
<td>*Yankee Road</td>
<td>Maple</td>
<td>1</td>
</tr>
<tr>
<td>Smith Park</td>
<td>Mulberry</td>
<td>2</td>
</tr>
<tr>
<td>Old Jefferson school lot</td>
<td>Mulberry, Ash</td>
<td>2</td>
</tr>
<tr>
<td>*727 Eleventh Ave.</td>
<td>Maple</td>
<td>1</td>
</tr>
<tr>
<td>*Long Lane</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>*Brent Dr. at Hood Ave.</td>
<td>Maple</td>
<td>1</td>
</tr>
<tr>
<td>*Breiel median</td>
<td>Honeylocust</td>
<td>1</td>
</tr>
<tr>
<td>*dumped at 920 N. Univ.</td>
<td>Spruce</td>
<td>1</td>
</tr>
<tr>
<td>Armbruster Nature Preserve</td>
<td>Maple, Ash, Hickory, Elm</td>
<td>12</td>
</tr>
<tr>
<td>*South University</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Jacot Park</td>
<td>Sweetgum</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Removed</strong></td>
<td></td>
<td><strong>27</strong></td>
</tr>
<tr>
<td><strong>Total Removed Right-of-Way</strong></td>
<td></td>
<td><strong>7</strong></td>
</tr>
</tbody>
</table>

*fell into right of way

Updated: 4/27/21
Poison Hemlock and Wild Parsnip: Control Them Now!

Authors: Joe Boggs (node/51)
Published on: April 6, 2021
Poison hemlock (Conium maculatum L.) and wild parsnip (Pastinaca sativa L.) are combined in this report because these invasive non-native weeds are increasingly found growing together in Ohio. However, the defense chemicals of these weeds are very different and have vastly different modes of action. This is important to understand relative to management options as well as medical treatments for exposure to these highly dangerous weeds.

Poison hemlock and wild parsnip belong to the so-called carrot family, Apiaceae (= Umbelliferae). They superficially share floral characteristics with other members of the carrot family such as Queen Anne’s lace (Daucus carota); however, this non-native biennial blooms much later in the season.
Queen Anne's Lace Flowers

Wild Parsnip Flowers

Joe Boggs, OSU Extension©

https://bygl.osu.edu/node/1763
Poison hemlock has a biennial life cycle. The first year is spent in the “vegetative stage” as a low-growing basal rosette; the stage that is currently very apparent. Plants “bolt” during the second year “reproductive stage” to produce erect multi-branched stems topped with umbrella-like flowers.
Poison Hemlock and Wild Parsnip: Control Them Now! | BYGL

Biennial Life Cycle

Poison Hemlock Spring Rosettes

Graphic by Joe Boggs, OSU Extension©
Wild parsnip is also reported to have a biennial life cycle. However, it may occasionally behave as a *monocarpic perennial* spending more than a year in the vegetative stage before flowering once and then dying.
Mature poison hemlock plants can measure 6 – 10 ft. tall. Mature wild parsnip plants are shorter in stature but still impressive at up to 4 – 5 ft. tall. Both are prolific seed producers with seeds remaining viable for 4 – 6 years for poison hemlock and around 4 years for wild parsnip.
Poison Hemlock

Poison hemlock was imported into the U.S. as an ornamental in the late 1800s from Europe, West Asia, and North Africa. Rogue plants remained relatively rare until around 30 years ago. Since that time, poison hemlock has elevated its profile from an uncommon oddity to a common threat.

This non-native is one of the deadliest plants found in North America. It is the plant used to kill Socrates as well as the Greek statesmen Theramenes and Phocion. Poison hemlock plants contain highly toxic piperidine alkaloid compounds, including coniine and gamma-coniceine, which cause respiratory failure and death in mammals.

All parts of the plant are poisonous: leaves, stems, seeds, and roots. However, the toxins must be ingested or enter through the eyes or nasal passages to induce poisoning. The toxins do not cause skin rashes or blistering. Regardless, this plant should not be handled because sap on the skin can be rubbed into the eyes or accidentally ingested while handling food. Immediate emergency medical attention should be sought if an accidental poisoning from this plant is suspected.

All stages of the poison hemlock plant have bluish-green leaves that are 3-4 times pinnately compound. The deeply cut parsley-like leaflets have sharp points. Flowering plants have hairless, light-green to bluish-green stems that are covered with obvious purplish blotches; Maculatum means 'spotted'. Clusters of tiny white flowers are borne on structures called umbels that look like upside-down umbrellas.
Poison Hemlock and Wild Parsnip: Control Them Now! | BYGL

Wild Parsnip

https://bygl.osu.edu/node/1763
Wild parsnip sap contains psoralen which is a naturally occurring phytochemical grouped in a family of organic compounds known as linear furanocoumarins. Psoralen acts as a photosensitizing compound by inhibiting DNA synthesis in epidermal cells which kills these light-shielding cells responsible for protecting us from long-wave ultraviolet radiation (LWUVR) bombarding us in sunlight.

Severe blistering occurs when the affected skin is exposed to LWUVR. The synergistic effect is called phytophotodermatitis (a.k.a. Berloque dermatitis) and the burn-like symptoms, as well as skin discoloration, may last for several months.

Connecting skin blistering to exposure to wild parsnip sap can be a challenge. It takes around 24 hours for symptoms to first appear after exposure to LWUVR and severe blistering typically doesn't peak until 48 - 72 hours. The time required for symptoms to appear after exposure to the sap means the effect may be disconnected from the cause.

Psoralens are also found in several other members of the Apiaceae family including the notorious giant hogweed (Heracleum mantegazzianum) which has captured national attention in the past. However, giant hogweed has only been confirmed in Ohio growing in the extreme northeast part of the state primarily in and around Ashtabula County. Wild parsnip is found throughout the state and is equally damaging. Of course, giant hogweed has a more threatening sounding common name while wild parsnip sounds like a vegetable gone wild; which it actually is!

Parsnips have been cultivated as a root crop in Europe for centuries, perhaps millennia. The "L." in the scientific name Pastinaca sativa L. means Linnaeus first described the species. Both the cultivated and wild types share the same scientific name; however, it is clear that there are significant differences in toxic biochemical properties between the two types.
It is theorized that the wild parsnip plants in Ohio represent "escapes" from cultivated types brought to North American from Europe and a "reversion" back to a wild type. The wild genes were always there but remained suppressed until revealed through natural selection.

Wild parsnip rosettes have celery-like leaves confined to growing from a short stem near the ground. While in this stage, the plant produces a long, thick taproot.

Flower stalks that eventually arise from rosettes have leaves that are alternate, pinnately compound, branched, and have saw-toothed edges. Each leaf has 5-15 ovate to oblong leaflets with variable toothed edges and deep lobes. The mature flowering plants have a single, thick, deeply grooved, greenish-yellow stem that sprouts lateral branches topped with hundreds of clusters of the yellow umbellate flowers.
Management
Unfortunately, poison hemlock and wild parsnip are becoming more common throughout Ohio and many other states in the upper Midwest as well as states in the eastern U.S. Worse, owing to the lack of awareness (e.g., identification) or poor management practices, or both, these dangerous non-native weeds are increasingly being found growing in close proximity to people which increases their risks to human health.
Additionally, it is not unusual to find poison hemlock and wild parsnip growing together which can create misinterpretations of exposure symptomology. This may account for some online resources incorrectly attributing skin blistering to contact with poison hemlock.
Mechanical management of poison hemlock can be used if it is certain that no wild parsnip is lurking within the poison hemlock. Still, personal protection equipment is strongly recommended particularly eye protection, gloves, and clothing to cover arms and legs to prevent sap from entering through the eyes or skin wounds. Hand-pulling and tilling are effective options if the area is immediately overseeded with grasses or other competitive plants to help suppress poison hemlock re-establishment from seeds germinating this fall.

Mowing can also be used; however, given that a sizable percentage of the current low-growing rosettes may escape the blade, it’s best to delay mowing to target bolting plants. String trimmers are also effective but present an even greater risk of flinging sap compared to mowing. All mechanical control options should be applied **before plants begin to flower**! Waiting until after plants flower, or worse after seeds are produced, can increase an infestation by removing canopy competition.
Given the extreme risk of phytophotodermatitis from wild parsnip sap, mechanical control is problematic. Hand-pulling is a high-risk endeavor and not recommended. Likewise, tilling could release a huge amount of harmful sap. There have been reports of sap spattered by mowers and string trimmers producing phytophotodermatitis on exposed arms and legs of equipment operators.

The safest approach to controlling this invasive weed as well as poison hemlock is to use herbicides. Of course, as always, read and follow label directions paying close attention to application sites, recommended rates, warnings against making applications close to desired plants (e.g. trees) or near water, and whether surfactants are recommended to enhance herbicide efficacy.

Both poison hemlock and wild parsnip are susceptible to several selective and non-selective postemergent herbicides. However, keep in mind that non-selective herbicides such as glyphosate (e.g. Roundup) can also illuminate plants that compete with these weeds. Herbicidal openings produced by non-selective herbicides provide perfect opportunities for more wild parsnip and poison hemlock to spring forth from previously deposited seed. Thus, it's important to have a plan for establishing competitive plants such as over-seeding with grasses.

Selective post-emergent herbicides will preserve competitive plants. Herbicides effective against wild parsnip and poison hemlock include clopyralid (e.g. Transline), triclopyr (e.g. Pathfinder II), metsulfuron (e.g. Escort XP), and combination products such as 2,4-D + triclopyr (e.g. Crossbow), or 2,4-D + mecoprop + dichlorprop (e.g. Triamine). Applications made now and before plants start to flower can significantly reduce infestations of both wild parsnip and poison hemlock.
Poison Hemlock Response to Transline

Joe Boggs, OSU Extension©

Poison Hemlock Response to Triamine

Joe Boggs, OSU Extension©
Wild Parsnip Response to Triamine

Tags
Poison Hemlock (/taxonomy/term/64)
Wild Parsnip (/taxonomy/term/109)
Conium maculatum (/taxonomy/term/1043)
Pastinaca sativa (/taxonomy/term/958)

OHIO STATE UNIVERSITY EXTENSION (HTTP://EXTENSION.OSU.EDU/)

THE OHIO STATE UNIVERSITY (http://www.osu.edu/)

website created by inVP team hvp.osu.edu (http://hvp.osu.edu)
© 2016, The Ohio State University
Send Comments to: Witney.1@osu.edu (mailto:Witney.1@osu.edu)

NEWSLETTER

Receive your BYGL through email! Visit our Newsletter page for more information - Subscribe Now (https://bygl.osu.edu/newsletter).

USEFUL LINKS

> PlantFacts (http://plantfacts.osu.edu)
> OhioLine (https://ohioline.osu.edu)
What is Your Growing Degree Day (GDD) Number?

Authors: Amy Stone
Published on: April 15, 2021

So what is your GDD - or growing degree day? Before you reach for a piece a paper, a pencil, and a calculator to figure out what your number is, check out the OSU's Growing Degree Day website. This website does the 'math' or the calculations to determine your GDD for you. All you need is an Ohio zipcode - type it in and hit enter. The website uses weather stations across Ohio to determine what the accumulations, and provides website visitors their GDD and where they are in a biological calendar of certain plants in flower and insect activity.
It is important to note that microclimates in our own landscape, or landscapes that you manage, can sometimes be ahead of, or even maybe lagging behind, but this information can be so useful and interesting. It is important to note that even if you appear to be ahead or behind of what the website is indicating, the order of plant bloom and insect activity remains the same. The sequence of order remains constant.

This morning, when I checked the website, Toledo (zipcode - 43615) was at 205 GDD. What this means is that gypsy moth caterpillars have begun to hatch (192 GDD), Donald Wyman crabapple is in first bloom (197 GDD), snowdrift crabapple is in first bloom (198 GDD), full bloom of compact garland spirea (205 GDD), full bloom of Koreanspice viburnum (GDD 205), and on the horizon is the egg hatch of the azalea lace bug (206 GDD).

https://www.oardc.ohio-state.edu/gdd/CalendarView.asp

This is why GDD is so useful!

Additionally, it fun (at least I think so) to compare where we are today, compared to the past. Sometimes we think, this spring is so early, or it feels like we are far behind an average spring. This website can help us remember what was happening horticulturally on this same day in the past. And even more cool, you can change the date too! So let's compare this spring, April 15, to year's past on the same day, April 15.

- 2021-205 GDD
- 2020-90 GDD
- 2019-85 GDD
- 2018-83 GDD
- 2017-201 GDD
- 2016-129 GDD
- 2015-78 GDD
- 2014-80 GDD
- 2013-69 GDD
- 2012-275 GDD
- 2011-66 GDD
- 2010-206 GDD
- 2009-103 GD
So if you look and compare we have definitely accumulated more GDD than other years, except for 2012 when at this same time, we had accumulated 275 GDD.

Hopefully you have been using the website and tracking your GDD, and then heading outside to verify what the website says we are at, to what your plants are doing. It really has been spot on this season. I can look out from my office window and see many of the plants that are included on the website. Additionally, I can head out to the field and monitor for and observe insect activity that is included in this list.

The post would not be complete without thanking Dan Herms, Denise Ellsworth, Ashley Kulhanek and others who have worked on this project including the research and data collection that allows OSU to have such an excellent website that used by many.

**Tags**
growing degree days (/taxonomy/term/79)
GDD (/taxonomy/term/80)
Plant Phenology (/taxonomy/term/1184)

**More Information**
OSU Growing Degree Day Website
https://www.oardc.ohio-state.edu/gdd/default.asp

**OHIO STATE UNIVERSITY EXTENSION (HTTP://EXTENSION.OSU.EDU/)**

**THE OHIO STATE UNIVERSITY** (http://www.osu.edu/)

website created by inVP team hvp.osu.edu (http://hvp.osu.edu)
© 2016, The Ohio State University
Send Comments to: Witney.1@osu.edu (mailto:Witney.1@osu.edu)

**NEWSLETTER**

Receive your BYGL through email! Visit our Newsletter page for more information - Subscribe Now (https://bygl.osu.edu/newsletter).

**USEFUL LINKS**

▶ PlantFacts (http://plantfacts.osu.edu)
▶ OhioLine (https://ohioline.osu.edu)
▶ (http://www.youtube.com/user/OhioStateUniversity)  (http://osu.edu/rss-feeds.html)
▶ The Ohio State University (http://www.osu.edu/)
▶ College of Food, Agricultural, and Environmental Sciences (http://cfaes.osu.edu/)
▶ Ohio State University Extension (http://extension.osu.edu/)
▶ Ohio Agricultural Research and Development Center (http://oardc.osu.edu/)

https://bygl.osu.edu/node/1765
Maple Leaf Development and Heavy Seed Production

Authors: Joe Boggs
Published on: May 5, 2021

Seed versus Leaves

Joe Boggs, OSU Extension©

https://bygl.osu.edu/sites/default/files/field/image/1%20Heavy%20Seed%20Production%20RED%201%20-%20JB.jpg
Concerned Ohioans are reporting their maples have stunted leaves or no leaves at all; particularly towards the top of the tree. Several issues can produce thinning maple canopies including poor site conditions, girdling roots, a vascular wilt disease, etc. However, it’s unlikely one of these issues has become so common or multiple issues have converged to produce a general widespread maple malaise throughout Ohio.

It’s more likely the common condition of thin maple canopies is a condition common to maples. Indeed, red (A. rubrum), silver (Acer saccharinum), and sugar maples (A. saccharum) in many regions of Ohio, as well as Indiana and Kentucky, have produced loads of winged seeds (samaras). The challenge is that the timing of the blooms and thus seed production varies widely between the three dominant maple species in Ohio with red maples usually the first to bloom and sugars the last.
Obviously, heavy maple seed production is a natural event securing the survival of the species as demonstrated by hordes of maple seedlings eventually appearing in landscapes, vegetable gardens, and gutters. However, this blatant demonstration of plant gene continuity can produce canopy conditions that make maples “look sick” causing homeowners to question the overall health of their maple trees.
The first challenge is the prolonged presence of stunted leaves. Trees shift energy to support heavy seed production at the expense of leaf expansion. Abundant springtime samaras by themselves can draw attention to maple trees, particularly when the seeds mature and turn brown. The trees will look bare when the massive numbers of seeds drop from the trees because the stunted leaves need time to fully expand to fill out the canopy. So, homeowners need to be patient.
It was once believed that prolific tree seed/fruit production is connected to tree stress. The theory was that heavy seed production occurred on stressed or dying trees as a last hurrah in support of the species. However, research has failed to provide consistent support for this speculative conjecture. For example, a study published in 2017 in the Canadian Journal of Forest Research found no evidence that stress associated with drought over previous seasons influenced seed production in sugar maples.

Another hypothesis emerged several years ago linking heavy seed production to the lack of spring freeze events. The thinking was that maples are by nature heavy seed producers but their effusive reproductive efforts are occasionally thwarted by freezing temperatures killing the flowers or nascent seed. This explanation carries some weight given that observations across Ohio in past years support a reduction in seed loads after spring freezes damaged vulnerable flowers or seeds.
However, research has shown that another important variable must also be considered. As with oaks, sugar maples exhibit synchronous seed “masting” in which all trees in a population produce heavy seed in certain years. It is thought synchronous flowering by wind-pollinated trees enhances the success of pollen finding.
way to receptive flowers. Also, heavy seed production can overwhelm seed predators which enhances successful maple stand regeneration.

Thus, heavy seed production occurs with the convergence of two events: a heavy “masting” year for the maple trees coupled with the lack of a killer freeze. It appears that maples in many areas of Ohio dodged the frozen bullet that put the kibosh on beautiful magnolia bloom displays.

The bottom line is that while heavy maple seed production is not consistent throughout Ohio, Indiana, and Kentucky, it's substantial enough in many areas to noticeably affect leaf expansion. The good news is that full canopies will eventually prevail; it will just take a little longer on trees that have produced a lot of seed.

Tags
maple (/index.php/taxonomy/term/169)
maple seed (/index.php/taxonomy/term/62)
thinning maple canopy (/index.php/taxonomy/term/1549)
dying maple (/index.php/taxonomy/term/1550)
NEWSLETTER

Receive your BYGL through email! Visit our Newsletter page for more information - Subscribe Now (https://bygl.osu.edu/newsletter).

USEFUL LINKS

› PlantFacts (http://plantfacts.osu.edu)
› OhioLine (https://ohioline.osu.edu)

› The Ohio State University (http://www.osu.edu/)
› College of Food, Agricultural, and Environmental Sciences (http://cfaes.osu.edu/)
› Ohio State University Extension (http://extension.osu.edu/)
› Ohio Agricultural Research and Development Center (http://oardc.osu.edu/)
› Ohio State ATI (http://ati.osu.edu/)
Horns are Popping

Authors: Joe Boggs (/index.php/node/51)
Published on: May 6, 2021

Horned Oak Gall with Emerging "Horns"

Joe Boggs, OSU Extension©
The “horns” that give the horned oak gall its common name are rising to the surface in southwest Ohio. The woody stem galls were formed under the direction of the gall-wasp, *Callirhytis cornigera* (Family Cynipidae) to feed and house immature grub-like wasps.

The immature wasps spend 33 months developing at the base of specialized horn-like structures. Cutting the galls open will reveal these “horns” embedded within the galls.

![Developing Horned Oak Galls](image-url)
Inside a Developing Horned Oak Gall

Embedded Horns

Disorganized Vascular Tissue

Joe Boggs, OSU Extension©

Inside a "Mature" Horned Oak Gall

Nectar

"Horn"

Gall Wasp Chamber

Joe Boggs, OSU Extension©
As the wasps approach maturity, the horns rise to the surface giving the new wasps access to the outside world. However, the woody stem galls don’t go away. They eventually dry out to look like some sort of medieval weapon.
The wasps that develop within the woody stem galls are all females; there are no males. Reproduction without the need for males is called *parthenogenesis*. Unfortunately, this reproductive strategy doesn't appear to be an evolutionary dead-end, but that's just one male’s opinion.

The new parthenogenetic females are poor fliers. The delicate asexual wasps crawl to leaf buds where they lay eggs to stimulate the production of small, inconspicuous leaf galls that will appear along the leaf veins later in the season.
The journey of the asexual wasps may be fueled by a sugary treat provided by their former horn abode. If you look closely at the tips of newly emerged horns, you’ll see tiny glistening droplets of nectar. At least, I believe it’s nectar; it’s sticky and sweet (personal taste-test).
The inclusion of extrafloral nectaries within the structure of wasp galls is not unusual. However, most galls ooze their sugary treat later in the season with the apparent goal of attracting stinging or biting gall-defenders.

A good example is oak rough bulletgalls that are produced under the direction of the cynipid wasp *Disholcaspis quercusmamma* (see *Extrafloral Nectaries, Myrmecophiles, and Other Trivial Pursuits*, BYGL Alert April 26, 2021). It’s too early in the season for the nectar oozing from horns of horned oak galls to attract gall-protectors from like bald-faced hornets (*Dolichovespula maculata*) and yellowjackets (*Vespula* spp.); they’re still in the early stages of nest construction. So, it’s speculated that the sugary treat may provide fuel for the newly emerged asexual horned oak gall wasps to help them with their journey.
The immature horned oak gall wasps that develop in the leaf galls require around 3 months to complete their development. The wasps that emerge are both males and females; this is the “sexual generation.” The mated females of this generation are relatively good flyers and migrate to twigs to lay eggs and initiate the production of the stem galls that arise from meristematic cambial tissue.
Gall Impact

The vast majority of the insect and mite galls found on oaks cause little to no harm to the overall health of their host trees. Horned oak galls are an exception.

![Heavy Horned Oak Gall Infestation](https://bygl.osu.edu/index.php/node/1777)

The galls can harm oaks if they encompass stems and disrupt the vascular flow. Cutting the galls open will reveal that vascular tissues become disorganized within the gall structure. The portion of the stem beyond the gall may die from being starved for water. The damage seldom kills trees; however, the canopy dieback may destroy the landscape value of heavily galled trees.
Horned oak gall wasps appear to be confined to members of the “red oak group.” Oaks that are commonly affected include black (Q. velutina), blackjack (Q. marilandica), pin (Q. palustris), shingle oaks (Q. imbricaria), Shumard (Q. shumardii), water (Q. nigra), and willow oaks (Q. phellos).

It’s generally perceived that pin oaks are particularly susceptible to galling and stem dieback. However, is it a matter of host selection or host impact? I and the horticulture professionals at Spring Grove Cemetery and Arboretum (Cincinnati, OH) have been monitoring three heavily galled mature shingle oaks for years. Stem gall density is on par with any heavily galled pin oak that I’ve ever observed. However, stem dieback is rare on all three trees. In fact, it becomes hard to tell that the trees are heavily galled once leaves fully expand.
This is good news because gall management is problematic with no clear method to reverse the galling trend once individual trees become targeted by the gall-wasp. Another management challenge is presented by the wasp's complicated life cycle involving asexual and sexual wasps that develop in stem and leaf galls, respectively. Both types of galls and their associated wasps occur at the same time.
Don’t Be Deceived

In the grand scheme of things, there is a strong argument that tree galls should be considered an integral part of forest ecosystems. For example, the ecological niche occupied by the horned oak gall wasp and its associated woody stem gall is important to the survival of over 30 other arthropods.

These gall-crashers are known as *inquilines* and they live in and feed on horned oak galls. They have nothing to do with gall development; they just take advantage of the work of the gall-making cynipid wasp. The beautiful little clearwing moth (family Sesiidae) known as the oak gall borer (*Synanthedon decipiens*) develops inside horned oak galls.
A Word from Management

**The Heterogony Headache.** The alternation of two different reproductive modes and lifestyles between generations of an animal species is known as "heterogony." However, heterogony with horned oak galls is not synchronous. The gall-maker resides in two locations at the same time on the same tree. Stem galls in various stages of development can be found at the same time as leaf galls.

The leaf galls occur every year providing a constant stream of wasps to produce new stem galls. This is why stem gall development is not synchronized. First-season stem galls are found on the same tree at the same time as when 33 month-old galls are releasing their wasps to initiate new leaf galls.

This makes managing this gall-wasp through pruning problematic. Galls of all ages would need to be found, pruned away, and destroyed. Missing a single gall means the eventual release of parthenogenetic female wasps that will produce a new crop of stem galls. Cutting out galled stems may provide some relief on small trees if the trees are not whittled down by continual pruning.

**Is it Select-o-Tree or Just Bad Luck?** One thing that is clear with horned oak galls: host susceptibility to these gall-wasps is highly variable. For example, I’ve been observing the row of pin oaks pictured below for several years. One tree has been a gall-magnet while all of the others have remained gall-free. It’s my understanding that the trees originated from the same nursery.
One explanation for the high degree of variability within the pin oaks could be the inherent genetic variability between the trees with some being more susceptible compared to others. It's my understanding these trees aren't clones; they were produced from acorns. Even though they are the same species, they are not genetically identical.

Is there a "founder effect" with wasps that are genetically best suited for utilizing a particular tree being selected over time? The successive generations of their progeny would then thrive and multiply to produce a gall explosion. Nearby trees escape because the wasps are not genetically "matched" to these host trees.

Other possible explanations involve rampant speculation. Are the wasps communicating through chemical signals that translate into "this tree is good eats" causing females to remain on the tree? Could the galls themselves exude volatiles that makes the tree more attractive compared to the other trees? Of course, it could be all the above, none of the above; or perhaps just bad luck.

**You Can't Spray the Problem Away.** Unfortunately, there is no scientific insecticide efficacy data available to guide the use of topical contact insecticides or systemic neonicotinoids for suppressing horned oak gall development. Anecdotal accounts of suppressing gall formation using canopy sprays or soil drenches/tree injections with neonicotinoids should be viewed with skepticism. An observed drop in stem galls after an insecticide application may be due to some other factor.

**Nature Doesn't Play Favorites.** Research has shown that these native gall wasps have several natural enemies that are capable of significantly affecting wasp population densities. The legless, grub-like wasp larvae residing within the thin-walled leaf galls are particularly alluring to parasitoids. Wasp numbers may also be affected by environmental events. A driving rain would be disastrous for the delicate wasps trying to make their way to emerging leaves. These natural challenges translate into wide swings in horned oak gall wasp populations.
The Bottom Line. It is clear that one effective gall-management option is to simply remove trees that for whatever reason have proven to be highly susceptible. Another option is to live with the problem by recognizing that this is not a tree killer. In fact, I think these galls add ornamental value, but I may be biased.

Credit Where Credit’s Due

Virtually everything we know about horned oak gall development and management comes from the Ph.D. thesis research conducted in the late 1990s by Eileen Eliason (now Buss) in partnership with her major advisor, Dr. Dan Potter, Entomology, University of Kentucky. Their work remains a touchstone example of the rigorous research required to unravel the intricate dance between an insect gall-maker and its plant host.

Tags
Horned Oak Gall (/index.php/taxonomy/term/114)
Callirhytis cornigera (/index.php/taxonomy/term/1281)
The Ohio Department of Agriculture will begin making treatments to manage the gypsy moth in the buckeye state. The caterpillars have hatched and have begun their feeding. Information shared in this BYGL Alert was provided by ODA in the form of a news release.

The Ohio Department of Agriculture (ODA) will soon begin aerial treatments to control the gypsy moth population in Ohio. Treatments are expected in early May, weather permitting, as larva and leaf development reach the optimal threshold.

The following areas will receive treatment:

- Hancock County: Arcadia
- Hocking County: South Bloomingville
- Licking County: Jersey
- Seneca County: Tiffin

Treatments are administered using a low-flying aircraft that flies just above treetops. High humidity, low temperature and minimal wind are crucial for a successful application. Treatment will most likely take place during early morning hours.

ODA will be using two kinds of treatments to control the gypsy moth caterpillar population, Foray (Btk) and Gypchek (NPV). Foray (Btk) is a naturally occurring bacterium found in the soil that interferes with the caterpillars' feeding cycles. Gypchek (NPV) is a naturally occurring virus that affects only the gypsy moth caterpillar when ingested. Both treatments are not toxic to humans, pets, birds, bees or fish.

Ohioans can view maps of treatment blocks at ODA’s Gypsy Moth website ([https://agri.ohio.gov/wps/portal/gov/oda/divisions/2Fplant-health/2Fgypsy-moth-program/2Fgypsy-moth-program&data=047C017Ckale.boyer%40agri.ohio.gov%7Ca743393801d54ac8171e08d90b198499%7C50f6bc494d84f0784eb36ed57c7d8a2%7C0%7C1%7C63755302](https://agri.ohio.gov/wps/portal/gov/oda/divisions/2Fplant-health/2Fgypsy-moth-program/2Fgypsy-moth-program&data=047C017Ckale.boyer%40agri.ohio.gov%7Ca743393801d54ac8171e08d90b198499%7C50f6bc494d84f0784eb36ed57c7d8a2%7C0%7C1%7C63755302)). When the project begins, daily updates on treatment progress across the state will be available on the website ([https://gcc02.safelinks.protection.outlook.com/](https://gcc02.safelinks.protection.outlook.com/)).
Gypsy moths are invasive insects that defoliate over 300 species of trees and shrubs. In its caterpillar stage, the moth feeds on the leaves of trees and shrubs and is especially fond of oak. A healthy tree can usually withstand only two years of defoliation before it is permanently damaged or dies. In Ohio, 51 counties are currently under gypsy moth quarantine regulations.

ODA uses three programs to manage the gypsy moth population in Ohio. The suppression program is used in counties where the pest is already established, but landowners voluntarily request treatment to help suppress populations. The second program, slow-the-spread, occurs in counties in front of the larger, advancing gypsy moth population. The third program is the eradication program, used in counties where isolated populations develop ahead of advancing moth populations due to human movement of the moth. Officials work to detect and control isolated populations to slow the overall advancement of the gypsy moth infestation.

For more information about the gypsy moth or for specific treatment locations, visit ODA's Gypsy Moth webpage.
Periodical Update: We’re Still Waiting …

Authors: Joe Boggs (node/51)
Published on: May 12, 2021

The long-anticipated magical appearance of Brood X (10) of the 17-year periodical cicadas (*Magicicada* spp.) has not yet gotten underway in Ohio. The clock is still ticking for the cicadas to take the stage en masse. My “cicada dig” yesterday in Butler County revealed cicada nymphs that had not yet developed the internal
coloring indicating they are about to spring from the soil.
This does not mean we won’t soon see periodical cicadas emerging in urban heat islands. However, much of the geographical range of Brood X in Ohio covers rural areas such as the location where I excavated the nymphs yesterday.
This is the third of what is anticipated to be a series of BYGL Alerts dedicated to Brood X happenings in Ohio, Indiana, and Kentucky. You can read the other Alerts by clicking these hotlinks:
https://bygl.osu.edu/node/1759
https://bygl.osu.edu/node/1773

Some Music for Your Listening Pleasure

Planning a Cicada Party? With social distancing, of course. Here’s a short playlist to get your party rolling as we wait for the mass appearance of Brood X!

These songs were gleaned from “Cicadamania;” an outstanding online cicada resource
https://www.cicadamania.com/

2020, Southern Culture On The Skids - Cicada Rock 2020 (Brood IX); a real toe-tapper, all six of them:
https://www.youtube.com/watch?v=UKpY8GxzxeU&t=25s

2016, The Cicada Song, CincyPolly; a song about the brief but exciting life of a young female cicada:
https://www.youtube.com/watch?v=Bn07-oPT_Sc

2013, CICADA, Hannah Gansen; a love affair seventeen years in the making:
https://www.youtube.com/watch?v=TqPLlgrQw9o

2013, Cicada Song 2013 - Sicka Cicadas (Brood II Re-mix), Kathy Ashworth; the title says it all:
https://www.youtube.com/watch?v=MvPYyfELKms&t=0s

2012, CICADA (Lyric Video), Liam Titcomb; you can sing along with this one:
https://www.youtube.com/watch?v=z28q4c6OCUk&t=31s

Tree Wrapping

Keep in mind that periodical cicadas co-evolved with their hardwood hosts. They are not tree-killers. Their oviposition damage to established trees does not affect the overall health of the trees. In fact, the tip dieback serves as natural pruning causing buds to produce more stems and foliage next season.

In most cases, management of the periodical cicada is not necessary. On the other hand, fruit trees and newly transplanted landscape trees may need to be protected from oviposition damage using tree wrapping.
However, it's important to use appropriate protective materials and proper application methods; improper tree wrapping can cause more damage than cicadas! Also, homeowners should assess whether or not their location places their landscape trees at risk.
I provided some “do’s and don’ts” with tree wrapping in my last BYGL Alert on Brood X. Below are pictures showing a recommended wrapping method using netting as well as an improper method using row crop cover fabric. Unfortunately, we’re getting reports from homeowners that netting and other proper wrapping material are becoming difficult to find.
Proper Tree Wrapping Netting

Cindy’s Way
https://bygl.osu.edu/node/1781
I received a phone call from a homeowner in southwest Ohio named Cindy who applied outside-the-box thinking to solve her tree-wrapping challenge. She used wedding tulle fabric. Frankly, being a guy who lives under a rock, I had never heard of this fabric! Indeed, I first wrote it as “wedding tool” in the notes I was taking during our phone conversation.

Cindy purchased two fabric bolts that measured 108 inches wide and 150 feet long. She paid $33.00 per bolt for her online order and was able to wrap all of her trees with some fabric leftover. I agreed to keep Cindy’s full name out of this Alert, but we both agreed on the appropriate name of her wrapping method.
As you can see, the fabric allows for good airflow keeping the foliage dry, and the weight of the fabric limits the deformation of new growth. According to Cindy, the downside is that the lightweight fabric presented some challenges with draping it over the trees particularly under windy conditions. She also had to custom-cut the fabric and close the side opening with staples. However, in my opinion, the results of her creative thinking were worthwhile.
Help Science: Join the Cicada Safari
There remain many unanswered questions about Brood X including the exact geographical distribution. Cicada populations are often highly localized with large concentrations commonly near areas with no cicadas. Future predictions depend heavily on where we do and don’t see periodical cicadas this spring.

Gene Kritsky worked with the Center for IT Engagement at Mount St. Joseph to develop an easy-to-use smartphone mapping app titled Cicada Safari. The **free** app can be download from the Apple App Store or Google Play.

All you need to do is snap a picture then hit the submit button. Once your image is confirmed as being a periodical cicada (and not your cat), the latitude and longitude for your observation are added to the cicada map.

I strongly urge that you download the app and use it to help us learn more about Brood X. Become part of the Cicada Safari!

Click on the hotlink below to access the Cicada Safari website
https://cicadasafari.org/ (https://cicadasafari.org/)

**Tags**
- Periodical Cicada (/taxonomy/term/257)
- cicada (/taxonomy/term/39)
- 17-year cicada (/taxonomy/term/162)
Magicicada (/taxonomy/term/164)
## Monthly Report for Parks and Grounds Division

**April 2021**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of trees removed/planted</td>
<td>14/18</td>
</tr>
<tr>
<td>Number of trees trimmed</td>
<td>10</td>
</tr>
<tr>
<td>Brush/limbs removed</td>
<td>51.5 hrs.</td>
</tr>
<tr>
<td>Playground equipment repaired</td>
<td>12</td>
</tr>
<tr>
<td>Litter picked up</td>
<td>264.5 hrs.</td>
</tr>
<tr>
<td>Special Events</td>
<td>55.5 hrs.</td>
</tr>
<tr>
<td>Splash pad maintenance</td>
<td>0 hrs.</td>
</tr>
<tr>
<td>Treatment with pre-emergent/herbicides</td>
<td>90 hrs.</td>
</tr>
<tr>
<td>Flowerbed maintenance</td>
<td>93 hrs.</td>
</tr>
<tr>
<td>Mower Inspector</td>
<td>108 hrs.</td>
</tr>
<tr>
<td>Snow removal-related activities</td>
<td>11 hrs.</td>
</tr>
<tr>
<td>Mow with arm tractor or batwing</td>
<td>49.5 hrs.</td>
</tr>
<tr>
<td>COVID-19 activities</td>
<td>11.5 hrs.</td>
</tr>
</tbody>
</table>