

VILLAGE OF LIBERTYVILLE
SUSTAIN LIBERTYVILLE COMMISSION

May 16, 2018
Village Hall Board Room
118 W. Cook Avenue
4:00 PM

AGENDA

- 1) Approval of Minutes - April 18, 2018
- 2) Zimmerman Pine Moth Article
- 3) 2018 Goals Finalization
- 4) 2018 Sustainability Plan Update
- 5) Village Views Article Status
- 6) Plan Commercial Recycling Project
- 7) Other Items/Updates
- 8) Adjourn

*Any individual who would like to attend this meeting but because of disability needs some accommodation to participate should contact the ADA Coordinator at 118 West Cook Avenue, Libertyville, Illinois 60048 (847) 362-2430.
Assistive listening devices are available.*

DRAFT

VILLAGE OF LIBERTYVILLE
Sustain Libertyville Commission

Minutes
Wednesday, April 18, 2018

A meeting of the Sustain Libertyville Commission was held on Wednesday, April 18, 2018 at 4:01 p.m. at the Libertyville Village Hall. Those in attendance included Commission members Chairperson Doug Reed, Carol Cooper, Joan Sayre and Dave Wilms. Also in attendance were Interim Village Administrator Kelly Amidei, Village Trustee Pat Carey, Management Analyst Patrick Hastings, Cathy O'Brien from Lake County Green Congregations, Chris Geiselhart from Audubon Society and Peter Adrian, Recycling Coordinator from SWALCO.

Approval of Minutes

Chairperson Reed asked that the minutes be amended as the cost of Village Composting was not specifically discussed. Carol Cooper made a motion to approve the minutes, as amended, of the April 18, 2018 meeting and Dave Wilms seconded the motion. Minutes were approved.

Increasing Commercial Recycling

Village staff developed a list of businesses in town that currently recycle. With this list, the Commission will start a program of providing businesses with window stickers to show that they support and engage in recycling. Using this list as one metric on recycling numbers, the Commission will have a way to determine if the program will have an effect on recycling practices and if additional businesses expand recycling options. Peter Adrian informed the Commission on commercial recycling container set-ups and possible ways of collecting recycling data that could be useful in determining program success.

Finalize 2018 Goals

Commission members discussed the final list of goals and went through different possible approaches to achieve the goals. Most objectives cover public outreach/education, coordinating with Village staff on policy changes and conducting research to determine the costs and benefits. Dave Wilms discussed the need for metrics related to the goals to determine the progress made.

2018 Sustainability Plan Update

Interim Village Administrator Kelly Amidei pointed out the need for a few updated numbers to include in the final Sustainability Plan. Next meeting the Commission will determine if more changes are needed and recommend it be forwarded to the Village Board for adoption at the following Board Meeting.

Educational Articles for Village Newsletter

Chris Geiselhart discussed other possible topics for educational articles to be included in the Village Newsletter in the event that more space comes available. Topics include Zimmerman Pine Borer and recreational trails throughout the Village.

Chris Geiselhart let the Commission know that there will be a Go Green Illinois meeting May 8 from 1pm-3pm and suggested Commission members attend. The next Commission meeting was scheduled for Wednesday, May 16, 2018. The meeting was adjourned at 5:44 p.m.

Respectfully submitted,

Patrick Hastings, Management Analyst

Landscape & Ornamental

Department of Entomology

MANAGING THE ZIMMERMAN PINE MOTH

Clifford S. Sadof, Extension Entomologist

The Zimmerman pine moth is the most important economic pest of pine trees in Indiana and the Midwest. The larva is capable of attacking and severely damaging most pine species in the north central part of the U.S. and poses a real threat to Christmas tree plantations. In Indiana, the insect causes greatest injury to Scotch and Austrian pines, and occasionally attacks spruce.

DISTRIBUTION

The Zimmerman pine moth was first found in the U.S. in 1879. Since then, it has been reported in 23 states, primarily in the northern part of the country. It was discovered in northern Indiana in 1956 and has now spread south of U.S. Hwy 40. Damage in the state has been reported as high as 65 percent infestation in a single plantation.



Adult Zimmerman pine moth.
(Photo Credit: Whitney Cranshaw)

SYMPTOMS AND DAMAGE

Early symptoms of Zimmerman pine moth (ZPM) attack are usually the wilting and browning of new tree growth. Infested terminals wilt and curve downward to resemble a "fish-hook" or "shepherd's crook." Eventually entire branches or tree tops will turn brown and break off.

Infestations can be detected by the presence of resin masses covered with white, sawdust-sized crumbs near the whorls. These masses will be white, soft, and shiny if



Zimmerman pine moth caterpillar.
(Photo Credit: Cliff Sadof)

infestations are active. They will be gray, hard and dull if old or inactive.

Zimmerman pine moth spends the winter as a young caterpillar in a shallow pit that it digs in the bark. When the weather warms in early April, this caterpillar crawls out of its resting place along the exposed bark surface to where the pine tree branches join the main trunk. It then bores into the tree where it feeds for several months. In younger pines, this feeding may occur near the top of the tree, causing the leader to curl and turn brown. In older trees, injury is often further down the trunk. Late in June and through July, when the caterpillars are deep in the trunk, wounds are gummy and covered with white crumbs of caterpillar excrement. In early August, the moths emerge and lay eggs on the tree trunk. Eggs hatch into caterpillars that feed in bits of bark until they dig their shallow pits where they spend the winter.

The moth seems to be attracted to wounds and previously infested trees. Larvae are also frequently attracted to sapsucker feeding sites.

DESCRIPTION

Adult: The moth is small, with a wingspan of about 1 to 1-1/2 inches. The body is gray; the fore-wings gray and mottled with zig-zag lines of red and gray; and the hind wings light tan, becoming darker near the edges. Adults are active only at night and are, therefore, rarely seen.



Sap oozing from wounds above and below the branch whorl. (Photo Credit: Cliff Sadof)



Dead top in tree. (Photo Credit: Cliff Sadof)

Eggs: These are round and initially cream-colored but turn light brown as they develop. Each female lays 20-30 eggs under bark flakes near wounds.

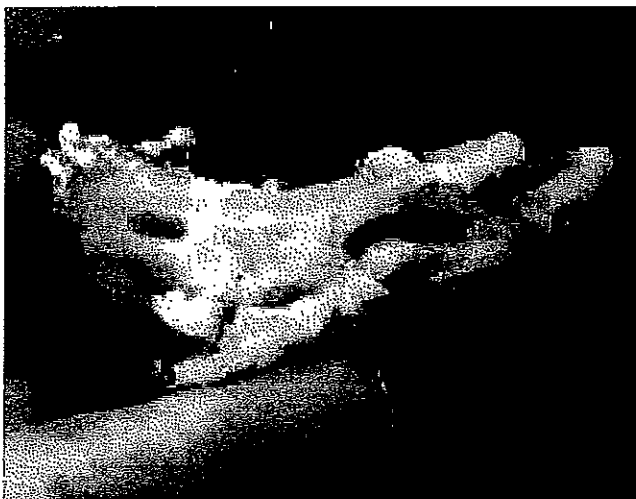
Larva: The full-grown caterpillar is about 3/4 inch long, has a brown head and a pink to greenish body, depending on the host and food supply. The body is covered with small black dots and resembles a black-spotted, pink European corn borer. The larvae overwinter in a small cocoon-like structure (hibernaculum) under bark scales.

Pupa: As the moth develops within the pupal skin, the pupa turns from light to dark brown. It is about 3/4 inch long and has no spines. It is found at the end of a tunnel just beneath the bark.

TREES ATTACKED

The Zimmerman pine moth is known to attack any of these pine species common to the northern U.S.:

- Scotch pine, *P. sylvestris* (L.)
- Austrian pine, *P. nigra* (Arnold)
- Mugho pine, *P. mugo* (Turra)
- Douglas fir, *Pseudotsuga taxifolia* (Britt.)
- Red pine, *Pinus resinosa* (Ait.)
- Corsican pine, *P. nigra poireniana* (Ant.)
- Japanese red pine, *P. densiflora* (Sieb. and Zucc.)
- Western yellow pine, *P. ponderosae* (Dougl.)
- Lodgepole pine, *P. contorta* (Dougl.)
- Eastern white pine, *P. strobus* (L.)
- Jack pine, *P. banksiana* (Lamb)
- Swiss stone pine, *P. cembra* (L.)
- Japanese white pine, *P. parviflora* (Sieb. and Zucc.)
- Himalayan pine, *P. griffithi* (McClelland), "Russian pine"



Sap mass with feeding holes. (Photo Credit: Cliff Sadof)

POSSIBILITIES FOR CONTROL

Natural Control. A number of species of parasites have been reported to attack the Zimmerman pine moth, the most abundant in Indiana being *Calliephialtes comstockii* (Cress). To date, however, parasitism has not been sufficient to control the moth. No important predators are reported in Indiana, although small black ants have been found feeding on dead larvae.

Applied Control. Like other borers, prevention of this problem starts by reducing environmental stresses on your tree. In landscapes, be sure to mulch your trees, provide adequate water. Mulching is not an option for Christmas tree growers and nurseries.

Control requires both sanitation and spraying of insecticide. Landscape managers should remove and destroy trees with extensive dieback in the landscape before late July when adults fly and lay eggs. Christmas tree and nursery producers should remove all trees with visible signs of Zimmerman pine moth infestations.

Early April is a great time for chemical control of Zimmerman pine moth because all the caterpillars become active and crawl out on the trunk surface when the weather warms. You can kill these caterpillars by soaking the tree and especially the trunk with a long lasting insecticide around April 1, before the temperature warms. When the caterpillars start crawling about and begin to dig deep into the trunk they will be killed by the poison residue on the bark. Be sure to soak the trunk with insecticide for effective control. For Christmas tree growers and nursery producers, this means using at least 100 gallons of total spray volume per acre, especially if you are using a mist blower.

Repeat the spray application in August to kill young caterpillars that hatch from the eggs. Permethrin (Hi-Yield 38), can be used by the home owner to control this pest. Chlorantraniliprole (Acelepryn) and Permethrin (Astro EC) is available for use by commercial landscapes to control this pest. Christmas tree growers have the option to use permethrin, or chlorpyrifos (Dursban).

READ AND FOLLOW ALL LABEL INSTRUCTIONS. THIS INCLUDES DIRECTIONS FOR USE, PRECAUTIONARY STATEMENTS (HAZARDS TO HUMANS, DOMESTIC ANIMALS, AND ENDANGERED SPECIES), ENVIRONMENTAL HAZARDS, RATES OF APPLICATION, NUMBER OF APPLICATIONS, REENTRY INTERVALS, HARVEST RESTRICTIONS, STORAGE AND DISPOSAL, AND ANY SPECIFIC WARNINGS AND/OR PRECAUTIONS FOR SAFE HANDLING OF THE PESTICIDE.

December 2017

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2018 Sustain Libertyville Commission Goals

WASTE & RECYCLING:

- 1) Increase Commercial/Community Wide Recycling
- 2) Newsletter Tips on Recycling
- 3) Paperless Board Packets
- 4) Increased Recycled Products Purchases

LAND USE:

- 1) Adopt Green Building Codes
- 2) Native Plantings/Rain Garden on Village Properties
- 3) Use Sustainable Practices at Village Buildings

ENERGY:

- 1) Dark Sky Compliance Education
- 2) Grants for Alternate Energy Options for Village Buildings

WATER:

- 1) Permeable Surface Education

LOCAL FOOD:

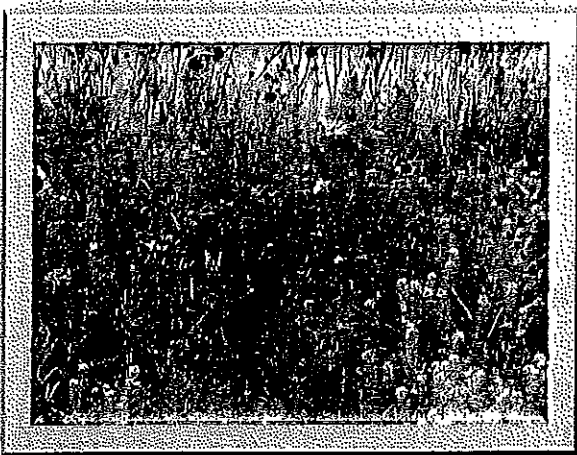
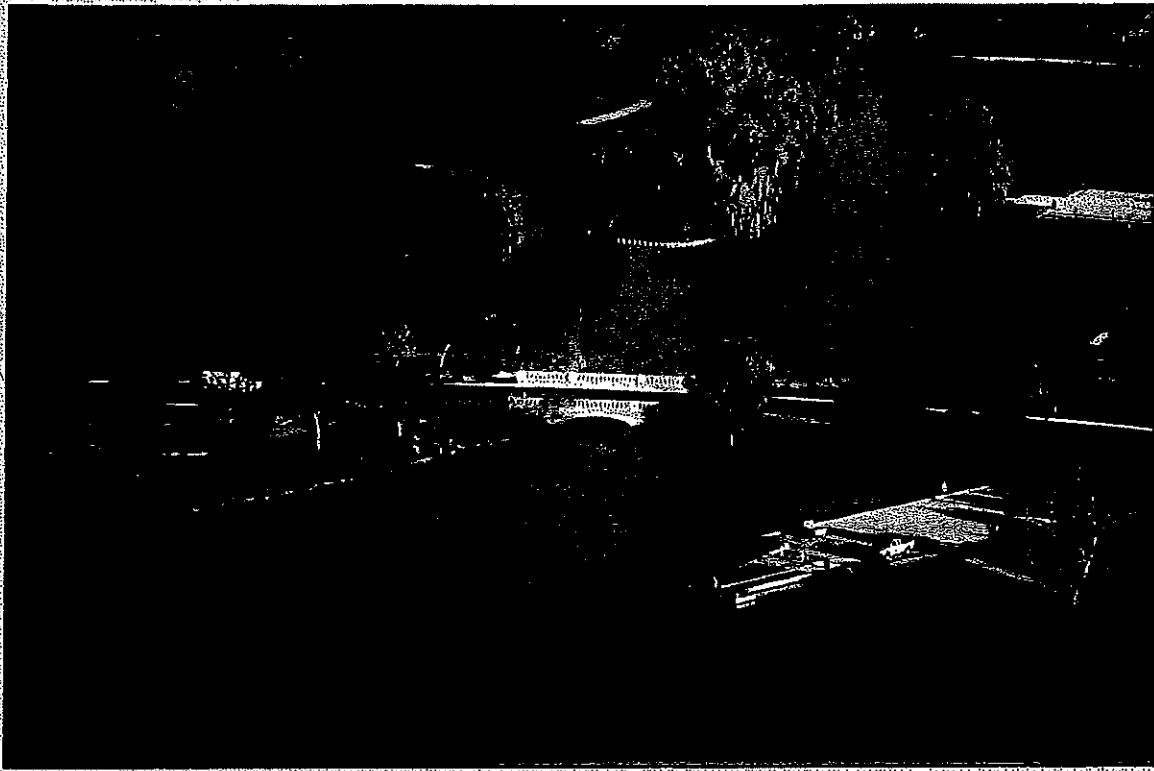
- 1) Reduce Non-Recyclable Take Home Food Containers (Group Purchasing)

AIR:

- 1) Alternate Energy Village Vehicles
- 2) Idle Free Zones (Start with Schools)/Consider Anti-Idling Ordinance

NOTE:

- 1) Further Education on all Goals



SUSTAINABILITY PLAN, 2018 Update

Accepted by the Libertyville Board of Trustees on XXXXX XX, 2018.

The Sustain Libertyville Commission was established via ordinance for the following purposes:

- **To Encourage residents/property owners, builders and developers to protect the environment**
- **To Make environmental information and resources readily available**
- **To Create partnerships with interested parties to help achieve mutually beneficial sustainability goals**
- **To Review and recommend sustainable initiatives which are fiscally responsible and enhance economic vitality**
- **To Provide recognition to those who have made exceptional contributions and/or efforts toward improving the sustainability of the Village**

Chairperson: Doug Reed

Members:

Joan Sayre

David Neu

Dave Wilms

Carol Cooper

William Cotey

Open

**Staff Liaison: Kelly Amidei,
Interim Village Administrator**

WASTE AND RECYCLING

CURRENT: The Village of Libertyville is a founding member of SWALCO (the Solid Waste Agency of Lake County). Libertyville works directly with SWALCO to promote the County-wide initiatives of SWALCO.

The 2009 Solid Waste Management Plan set a goal of a 60% recycling rate for Lake County by the year 2020. SWALCO's recycling task force set-up the following specific goals for its' members.

Municipal Waste Franchise	Completed in 2006
Recycling Carts	Completed in July, 2010
Cart Upgrade Option	Completed in December, 2014
Volume Based (PAYT) Option	Sticker program offered for many years (15+)
Multi-Family Franchise	Implemented on February 1, 2015
Commercial Franchise	Implemented on February 1, 2015
Construction & Demolition Debris Ordinance	Future goal
E-Scrap Collections	600 North Ave. Open May-October 8AM-Noon
Textile Collections	LCDOT-Year round
Pharmaceuticals Collection	Police Department-Year round

Per Capita Per Day Disposal Rates (2010-2015)

2010	2.07 lbs
2011	1.95 lbs
2012	1.88 lbs
2013	1.94 lbs
2014	1.82 lbs
2015	1.57 lbs
2016	XXX lbs
2017	XXX lbs

GOALS

2015	1.60 lbs.
2020	1.35 lbs.

WASTE AND RECYCLING

Accomplishments

- SWALCO initiatives previously listed.
- The Village's single-family residential recycling program began in 1990 (approx.) and the tonnage has increased from 2064 (1999) to 2265 (2017).
- Christmas tree composting is offered annually.
- Commercial Waste contract now includes recycling up to 1.5 cubic feet at no additional cost.
- The Village utilizes numerous recycled and green products. Also Village buildings have recycling and composting when feasible.
- Added recycling containers to Village parks.
- Expansion of recycling to businesses and multi-family.
- Elimination of bottled water at Village facilities (currently encouraging). Added refillable water fountains at certain Village facilities.
- Recycling at Libertyville Days was initiated during 2015 and continues.
- Recognize businesses that are recycling with a sticker/decal program.
- Operating a resident Electronics drop-off site.
- Offering of larger residential recycling bins.

WASTE AND RECYCLING

Future Goals/Initiatives

- Continue to recognize businesses that are recycling with a sticker/decal program.
- Document the current amount of recycling from businesses and work to increase participation and amount recycled, to meet the PCPD goal for 2015/2020. (Please note 2015 goal was met)
- Continued public education efforts through the Village newsletter, website, and other communications on “green tips” for Village residents and businesses.
- Education and Awareness through dedicated website and communication pieces.
- Increase the amount of recycled products used in Village facilities.
- Expand to an all year long residential electronics drop-off site.
- Continue to coordinate with Lake County Green Congregations.
- Increase recycling at community events.
- Encourage residents to clean up found recycling items in the community.
- Business and residential food composting.
- Offer food composting (Village businesses only). SWALCO intern to go “door-to-door”.
- Dissuade straw usage.

AIR

Current:

Accomplishments

- The Village participates in the Illinois Environmental Protection Agency (IEPA) partnership for clean air and limits certain polluting activities on designated ozone action days.
- Civic Center converted lawn mower, leaf and snow blower equipment to battery operation, eliminating gasoline storage.
- EV charging stations were installed in the new Church Street parking facility.
- Village policy on idling of Village vehicles.
- Bike to Metra Map created through grant with and in partnership with Libertyville Township.
- Received a grant from the Metro Mayor's Caucus to retrofit 7 diesel powered vehicles and reduce emissions.
- Summer police bicycle patrol.
- Tree City USA recipient for 20 years and offers 50/50 tree program.
- Promotion of the Shop Libertyville economic development campaign to emphasize saving gas and traveling time.
- Two EV charging stations located at the Church parking garage and preferred parking.
- Explore options for less environmentally impacted mosquito control. Implemented cost-effective changes.

Future Goals/Initiatives

- Further promotion of bicycling by highlighting the Village bike path system, bike racks in Village parks and at all Village facilities. Work with Bicycle Advisory Commission.
- Install additional EV charging stations in the Village.
- Review replacement of Village owned vehicles with EV or hybrid vehicles.
- Idle free zone education.
- Explore the use of alternate energy for Village vehicles.
- Explore options for less environmentally impacted mosquito control.
- Preferred parking for E vehicles in downtown/commuter parking areas.
- Educate and encourage the use of air filter scrubbers for restaurants.

LAND USE

Current:

Accomplishments

- Maintain and continued preservation of Village owned open space and park land.
- Several Village projects have incorporated naturalized landscaping features, including shoreline stabilization and native prairie plantings along the shore of Butler Lake, and the installation of a bio-swale along the east-side of Butler Lake.
- Educational Information on native plant alternatives was presented during the 2018 Green Living Fair and is also planned for the Spring newsletter.

Future Goals/Initiatives

- Review options to incorporate green building codes and potential incentives for use of green building initiatives. (ongoing)
- Review options to implement a Construction & Demolition Debris Ordinance. (ongoing)
- Continued publication of educational items in Village Views, such as native plant alternatives.
- Investigate options through Cool Cities Global Alliance program.
- Educate on alternatives for property management.



2018 Green Living Fair

ENERGY

Current:

Accomplishments

- Distributed 5,200 CFL (Compact Fluorescent light bulbs) provided by the Metro Mayors' Caucus. Bulbs were available at the Green Living Fair, Library and Village Hall.
- Village website hosting site powered with renewable energy (wind).
- In 2012 the Village obtained a \$103,000 grant for the replacement of lighting fixtures at the Libertyville Sports Complex. The usage savings was anticipated to be 88.935 kw/year (need to confirm number).
- Review cost associated with converting Village's traffic signals to LED and reducing electrical consumption.
- Parking garage and other Village facilities also converted to energy efficient fluorescent lighting utilizing grants in the amount of \$303,264. The Village usage savings is anticipated to be 779,201 kwh/year.
- Use of solar power for warning sirens operating in Village.
- Assisted with launch of ComEd smart meters in 2017.
- Groot vehicles for Waste collection utilizing CNG for "fuel".

Future:

Goals/Initiatives

- Education of options for residents.
- Facilitate home energy programs provided by electric and gas providers.
- CUB energy saver program for savings suggestions.
- Educate on real-time usage of electric and gasoline.
- Explore options to convert streetlights to LED/Solar.
- Explore grants for alternative energy options for Village buildings.
- Educate on use of energy to produce items in order to minimize energy use.

WATER

Current:

Accomplishments

- The Village is a certified storm water management community since 1999. This requires the Village to review developments and protect the surrounding environment from potential damage from storm water runoff.
- The Village is a founding member of the Central Lake County Joint Action Water Agency (CLCJAWA) which provides the Village with a supply of water from Lake Michigan and requires ongoing water conservation regulations and enforcement.
- In January of 2015 the Village Board approved an ordinance banning the use of phosphorous fertilizer (with some exceptions) in the Village.
- The Village takes great pride in operating its Wastewater Treatment Plant in accordance with EPA regulations.
- Explore a high water usage rate. Currently have a tiered rate structure.

Future:

Goals/Initiatives

- Educate residents on the importance of water conservation (Lake County Stormwater Management Commission) with ongoing tips.
- Explore a high water usage rate.
- Lake and river clean-ups.
- Explore use of water at Riverside Park (Des Plaines river?).
- Promote watering ban (established).
- Explore use of rain barrels at Village locations. Consider at train stations.
- Investigate participation in the Mayor's Waters program.



LOCAL FOOD

Current:

Accomplishments

- Continued to promote and coordinate with the Community Gardens, such as sharing composting trial information.
- Publicize the Libertyville Farmer's Market (run by MainStreet Libertyville).

Future:

Goals/Initiatives

- Promote CSA's (Conserve Lake County).
- Promote grow your own food on site-save \$.
- Coordinate free plants/seeds available.
- Consider Homestead market (similar to Mundelein).
- Inform residents of what options are available

