

City of Falcon Heights Environment Commission

City Hall
2077 Larpenteur Avenue W.

Monday, March 8, 2021
6:30 p.m.

A G E N D A

Note: This meeting will be held by web conference. *
<https://us02web.zoom.us/j/84727439535>

A. CALL TO ORDER: 6:30 p.m.

B. ROLL CALL: Jim Wassenberg ____ Nick Olson ____
 Martin McCleery ____ Patrick Mathwig ____
 Jordyn Bucholtz ____ Esha Seth ____
 Pedro De Filippo Vannucci ____
 Council Liaison Wehyee ____ Staff Liaison Moretto ____

C. APPROVAL OF MINUTES: February 8, 2021

D. AGENDA

1. Selection of Chair and Vice-Chair
2. Discussion EC Corner
3. Discussion Preparing for Beekeeping Applications (educational Items)

E. NEWS AND ANNOUNCEMENTS

1. Other

F. ADJOURN

Next Meeting: April 12, 2021

If you have a disability and need accommodation in order to attend this meeting, please notify City Hall 48 hours in advance between the hours of 8:00 a.m. and 4:30 p.m. at 651-792-7600. We will be happy to help.

City of Falcon Heights
Environment Commission

Online

Tuesday, February 8, 2021

6:30 p.m.

MINUTES

A. CALL TO ORDER: Chair Wassenberg called the meeting to order at 6:33 p.m.

B. ROLL CALL:

Members present: Bucholtz, De Filippo Vannucci, Mathwig, Wassenberg, McCleery and Olson

Also present: Council Liaison Wehyee, Staff Liaison Moretto

Members absent: Seth

C. APPROVAL OF MINUTES: November 9, 2020

A motion was made and seconded to approve minutes for November 9, 2020.

D. AGENDA

a. Discuss and Revised 2021 Work Plan

i. The commission discussed the attached 2021 workplan and agreed that the items represented the priorities for the commission. It was discussed that each member would champion an item on the priorities list.

ii. Outcomes included:

1. Educational materials would be looked at for ordinances recently passed.
2. The commission would look into possible partnerships with non-profits and other governmental organizations.
3. The commission will continue to look into EV charging stations.
4. The commission will continue to research improvements that can be made to the city code.

E. ADJOURN

a. Meeting was adjourned at approximately 8:00 p.m.



The City That Soars!

ENVIRONMENT COMMISSION MEMO

Meeting Date	March 8, 2021
Agenda Item	Agenda D1
Submitted By	Paul Moretto, Community Development Coordinator

Item	Selection of Chair and Vice-Chair
Description	<p>All commissions are required to have a chair and vice-chair to act as facilitator to the commission. The duties and responsibilities of the chair, or the vice-chair in their absence, are to:</p> <ul style="list-style-type: none"> • Guide the discussions and to keep the discussion on topic • Open and close meetings and to call the role • Facilitate discussion and arbitrate disagreements • End debate when time has elapsed or if the debate is no longer fruitful • Work with staff to develop the process and topics of discussion for the following meeting • Speak for the commission when called to events or to speak before the Council <p>The chair and vice-chair positions are for one year. Someone must be nominated before or at the meeting and a vote must be held. A simple majority is required. The chair will be chosen first. The vice-chair will be chosen second.</p>
Action(s) Requested	Select a chair and vice-chair.



The City That Soars!

ENVIRONMENT COMMISSION MEMO

Meeting Date	March 8, 2021
Agenda Item	Agenda D2
Submitted By	Paul Moretto, Community Development Coordinator

Item	Create topics and a schedule for the EC Corners for the newsletter
Description	<p>Education, as one of the priorities for the Environmental Commission, is a critical piece regarding the impact the city can have on a wide array of environmental issues. It was discussed that the commission would develop letters for the weekly newsletter, in the form of a EC Corner, regarding topics of importance to the environment and the city. The purpose of the discussion is to formalize: What topics we will write, when they will be written, who will write it.</p> <p>The outcome of this discussion should be a list with topics, dates and authors.</p>
Action(s) Requested	Create a list that contains the topics, dates, and authors for the EC Corner in the weekly newsletter.



The City That Soars!

ENVIRONMENT COMMISSION MEMO

Meeting Date	March 8, 2021
Agenda Item	Agenda D3
Submitted By	Paul Moretto, Community Development Coordinator

Item	Prepare for application for beekeeping by selecting educational items for the application.
Description	<p>The City of Falcon Heights allows beekeeping. 2021 will be the first year for beekeeping. A new application and process will be developed for this activity. It was discussed as a priority that an educational component be provided to applicants to help navigate the challenges of beekeeping.</p> <p>Staff is looking for materials recommended by the Environmental Commission and other qualified sources to provide to the public before they apply for the beekeeping permit.</p>
Action(s) Requested	Provide commission recommended materials for beekeeping that would be attached to the beekeeping application.

BEE AWARE!



Falcon Heights has the honor, within its boundary, of an internationally renowned, bee lab as part of the University of Minnesota land grant college. Everything there is to know can be found at <https://www.beelab.umn.edu/>

Here are some facts available on the site:

Most bees (between 60 and 70%) dig burrows in the ground. The other 30-40%, the cavity-nesting bees, use hollow plant stems or holes in wood left by wood-boring beetles, instead of digging their own tunnel in the ground.

There are almost 20,000 known species of bees in the world. About 3,500 live in the United States, and in Minnesota, there are probably close to 400. Less than 2% of these are honey bees and bumble bees. The other 98% are wild bees.

Interested in attracting wild bees to your yard or garden? They require food and shelter. Flowers provide food for bees in the form of nectar and pollen. Not all nectar and pollen is equally nutritious, so a variety is important for a healthy bee diet. The greater variety of flowers there are the better the bee availability. Wild bees generally have a much shorter foraging range than honey bees.

Honey bees pollinate most of our crops. Wild bees make sure garden plants, ornamentals, and wildflowers get adequate pollination. They are better at pollinating a lot of plants. Bumble bees make great tomato and pepper pollinators. The solitary blue orchard bee pollinates early in the spring. The squash bee seeks out pumpkins, squash, and other cucurbits to the exclusion of others.

Building Wild Bee Houses:



Simplicity: Accessibility: Reusability:

The simplest type of bee house is the bundle of sticks model. Just take some hollow sticks or reeds, bundle them up, and put them out where bees can find them. Provide shelter to keep the sun and rain off.

Bamboo is a popular material. You can even collect dead stems from your garden in the fall or spring for: Raspberries, bee balm, Joe-Pye weed, cup plant, sumac, certain asters, or anything with a large hollow stem. More information is available on the above web site.

Common Visitors to Wild Bee Houses

They come in all shapes and sizes.



Bees *Osmia* (mason bees) fly from early spring to early summer. Nests are highly variable depending on the species. Most construct cells with mud or leaf pulp, but sand, gravel, resin, wood chips, or flower petals may also be used. The adults are dark, bulky bees, often with a metallic blue sheen, and are easily recognizable but rarely seen due to their fast flight.



Hoplitid fly from mid-spring to early summer. They are closely related to mason bees and have similar habits. Nests can be made out of leaf pulp or mud. The adults look like mason bees, except somewhat slenderer and usually without any metallic sheen (one Southern species is brilliant bright green or purple).



Heriades fly all summer. A small group, there are just two common species in the Midwest (11 in all North America), and both use plant resin to construct cells. These are small, black bees with short white hair, easily overlooked in the wild. *Heriades carinatus* prepupae in cells made completely of hardened plant resin.



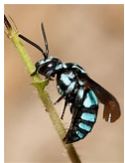
Hylaeus (yellow-faced bees) fly all summer, and are one of the few cavity-nesting bees not in the family Megachilidae. Only Megachilidae use foreign material (leaves, mud, resin, etc.) in their nests; yellow-faced bees make cells out of a thin, clear film that they secrete from glands on their bodies. The adults are tiny, hairless, and glossy black with yellow markings



Hylaeus prepupae in fragile cells of thin, clear waterproof film.



Anthidium (carder bees) fly all summer. They collect hairs off of certain fuzzy plant leaves and make a woolly substance with which to line their nests. Adults are black with yellow markings, and are easily mistaken for wasps or hover flies, although they have the stout body and long hair of a bee. The most common species is the invasive European wool carder bee, whose males have a distinctive hovering flight as they patrol their territory, chasing away other bees that get too close.



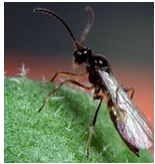
Coelioxys and Stelis are cleptoparasitic bees. They do not make nests of their own; instead, they find another bee's nest, destroy the host bee's egg, and sneak their own egg in its place. The host bee can't tell the difference, and the cleptoparasite larva will eat the host's pollen, all without the cleptoparasite mother needing to do any work. Fortunately, cleptoparasitic bees are very rare and do not have a large impact on host populations compared with other factors (such as disease). Coelioxys adults resemble leafcutter bees with short hair and a long, sharply pointed abdomen. Stelis adults resemble short-haired mason bees or carder bees, often with pale spots or yellow stripes on the abdomen.



Wasps Like solitary bees, solitary wasps are much gentler than their social cousins. They will not sting under normal circumstances, even if you open their nests.

Unlike bees, wasps are predators. Instead of provisioning cells with pollen, they will catch prey and bring it back to the nest for the larvae to eat. Solitary wasps visit flowers for nectar and do some incidental pollination, but their main benefit is in keeping pest insect populations down. Ancistrocerus and Euodynerus (potter wasps) fly all summer. Their nests are made out of mud

and stocked with small caterpillars or beetle larvae. They have two generations per year, one in early summer and another in late summer. Adults are large, glossy black, with yellow stripes and spots.



Passaloecus (aphid wasps) fly in early summer. Nest cells are made out of pine resin and stocked with a couple dozen aphids each. The adults are tiny, black, and unremarkable; perhaps their most distinguishing feature is their large protruding jaws. Due to their efficiency at collecting aphids, they have been considered as a possible aphid biological control agent, something any gardener should be interested in.

Passaloecus prepupae, along with uneaten aphids (6th cell from right) and a parasitic chrysidid wasp (9th from right.) Isodontia (grass-carrying wasps) fly in mid-summer. As their name suggests, grass-carrying wasps carry grass to build their nests, which they stock with captured tree crickets. No other bee or wasp uses grass as a construction material. Adults are large and solid black, with a distinct narrow “waist” between the thorax and abdomen.

Abandoned Isodontia nest with grass filling.



Chrysididae, Sapyga, Ephialtes, Melittobia, and others are parasitoids that fly at various times depending on host activity. Parasitoid wasps find a host (in this case, a solitary bee or wasp larva) and lay an egg in or on it. The parasitoid larva then hatches and eats the host alive. Parasitoid wasps are extremely diverse and more common than cleptoparasitic bees.



Anthrax, a parasitoid fly, also attacks solitary bees and wasps.



Pompilidae (spider wasps) fly in summer. Most nest in underground burrows, but a few will use solitary bee houses. Nest cells are made out of mud, sometimes in a distinctive pot shape, and stocked with one spider each. Adults vary greatly in appearance, but most species using bee houses are small, black, and slender. If you are lucky, these rarely-seen wasps can help protect your bee house from spiders.

Sources of information

- Wild Bees and Building Wild Bee Houses, www.BeeLab.umn.edu, Written by Joel Gardner.
- Pictures from various internet sites for bee houses for sale.
- <https://www.beelab.umn.edu/>