**IPM MEETING**
**BISD Board Room** **4.17.19**

**PRESENT:** Christy Carr, Dana Coggon, Charles Schafer, Walter Goodwin, Dianne Speers, Logan Fenwick, Russell Milbrot, Chris Rauch, Bernie Mejia, Dane Fenwick, Steven Lewis, Ivan Wesson
**ABSENT:** Dan Hamlin

**INTRODUCTIONS**
Christy Carr, Senior Long Range Planner for the City of Bainbridge Island (CoBI) stated that the city is taking the year to extend consideration of the Critical Areas Ordinance (CAO). Christy encouraged the group to submit comments.
Charles Schafer expressed concerns over the ongoing loss of bee habitats. The negative impact of collapsing bee colonies and its' effect on pollination of both flowers and orchards has caught the world's attention.
The collapse is partially due to the increase in development and because of the obsession with having perfectly manicured properties. He quoted Ann Lovejoy's term "poison neat". The bees' main enemy continues to be the Verroa Mite, a parasite that attacks honey bees and brood by sucking their blood. This pest shortens the bee's lifespan and causes deformities in the emerging brood such as missing wings and legs. Bayer is currently working with the University of Washington to find a solution to Verroa Mites.

**INTEGRATED PEST MANAGEMENT -Presentation Dana Coggon**
Dana Coggon presented an introduction to integrated pest management and its importance.
Dana can speak intelligently on the subject as she holds an undergraduate degree in bio-agricultural sciences and pest management (sustainable agriculture with a minor degree in entomology) and a masters degree in weed science and plant pathology (a combination of plant physiology and chemistry). Integrated Pest Management "is a science-based approach to managing pests using a variety of safe, sustainable and effective tactics against common garden pests which may include insects, weeds, diseases, birds and rodents."
Each entity, including schools, have a threshold point which triggers action to treat pests. For example, Safeco Field would have a low threshold for weeds as they must have a publicly acceptable look to their property.
IPM combines the following with consideration given to regulations, the environment and economics;

**Cultura**l – Plant selection - selecting pest resistant varieties (ie. some plants are more heat tolerant and better for the current global warming environment.)
Rotating crops
Plant spacing
Turf Cultural Control – Fertilizing produces better grass which means fewer weeds,
Mowing longer 2.5" to 3.5" enables the grass to fight weeds better and inhibits burning from the sun, and
Watering (overwatering can have the opposite of the desired effect by drowning out the grass while feeding the weeds.)

**Physical** - Mechanically pulling weeds or snipping caterpillar sacks out of trees and placing the sacks in soapy water.
Propane torching pests and weeds (can be dangerous).
Creating a barrier to pests.
Trapping, suction devices and collecting machines.

**Biological** – The Tachinid Fly – a parasitic fly that feeds on other insects such as aphids.
Bacillus Thuringiensis is a natural occurring soil-borne bacteria not toxic to humans and is used as an insect control commonly used on tent caterpillars.
The Cinnabar Moth was introduced to North America to control the noxious weed, Ragwort.
Goats are not selective but do leave behind fecal matter.

**Chemical** - When to use pesticides: when you have exhausted all other options.

Using pesticides such as vinegar is more toxic than the alternatives. When it rains, vinegar does not biodegrade or bind and it enters the water system. In addition, vinegar evaporates in the heat and off- gases creating a gas that can burn your lungs. Corn starch will work for a week and then becomes fertilizer. Soap works on weeds as well as insects but does not reach the roots of the weeds.

Nicotinoids – Are applied to plants sold to consumers. They have been known to negatively impact bees. As a result, they are not used by reputable nurseries (note: BISD has a no Nicotinoid policy).

**Pesticide is not a dirty word** and applied in appropriate quantities at the right time, can be an integral part of pest management.

**Prevention –** Planting the appropriate plant to the location.

**Relative Toxicity** –

Consideration must be given to the danger and effect a pesticide or chemical poses to humans, wildlife and other non-targeted organisms. For example, Glyphosates have been in the news recently as causing cancer. However, several factors contribute to the volatility of the chemical such as heat. The overuse of Glyphosate as an over-the-counter purchase has resulted in a notable presence of the chemical in water samples taken in residential areas. Areas treated too often by non-professionals will increase the level of toxicity without impacting the treated pests. Over-the-counter herbicides as well as bleaches, cleaners, gasoline, and kerosene are most often used without consideration of the amount and frequency of use. The biggest problem with products such as Roundup is that it is too readily available.

Dana reminded the group that those resistant to pesticide use, commonly used household products such as antibacterial soap, bleach and vinegar all include chemicals that kill unwanted pests (germs and bacteria).

The number one impact on salmon streams is not pesticides but micro dust from car tires (tire dust contains such heavy metals as zinc and lead and is known to be especially toxic to aquatic creatures).

**Pesticide Characteristics include;**

**Adsorption** – the binding of chemicals to particles such as clay and organic matter increase binding and decreases the potential for pesticides to move through the soil.

**Degradation** – an important means for destroying pesticides in soils. Some soil microorganisms use pesticides as food, such as bacteria and fungi.

**Chemical Use Guidelines:**

1. Understand how the pesticides might move in the environment.
2. Reduce the drift by applying at the right time, in the right place with the right technique.
3. Prevent groundwater and surface water contamination.
4. Protect sensitive areas, non-target organisms and endangered species.

**Noxious Weeds -**

Noxious weeds such as ragwort, tansy, poison hemlock and knotweed are found on school and city properties. According to RCW 17.10, property owners are responsible for treating noxious weeds on their property.

**Conclusion**: "Pest management is a balancing act between managing pests and weeds, environmental health, people who are fearful of what they don't know and those people who think they know."

**BAINBRIDGE ISLAND SCHOOL DISTRICT CHALLENGES – Bernie Mejia**

The schools have many challenges; wetlands on the Blakely site and the Woodward and Sakai proximity to salmon streams.

The Blakely school replacement will be landscaped with an overwhelming number of ornamental beds mandated by the City of Bainbridge Island.

The Sakai roof is covered in moss too thick to remove mechanically.

Currently the Woodward field is covered in weeds posing a tripping hazard to athletes in the field as well as providing a haven for wasps. The grounds department tried to cut it short but the dandelions adapted and now flower at ground

height. It has been 20 years since any of the fields were treated and the Maintenance/Grounds Department would like the administration and school board to revisit pesticide use on the fields.
Bernie asked Dana if there was a way of treating the fields that would not impact the streams. Dana thought that if pesticides were walked using a flat fan spray on a dry day it would likely be safe. Weed and feed is not a good product to apply. It was recommended that "special dispensation" for such a situation could be presented to the board as a one-time treatment.
In light of the resistance to treating the weeds with pesticides, the department is shifting focus to growing ground covers for the ornamental beds.
Landscaping using more grass than ornamental beds is easier for the grounds crew to maintain.

**CITY OF BAINBRIDGE ISLAND (COBI) – Christy Carr**
COBI applies the same vegetative filter formula for all new developments, requiring landscaped buffers along roadsides of varying depths dependent on the type of road. Landscape requirements are established by COBI.

**SUSTAINABLE BAINBRIDGE/LETS PULL TOGETHER SCOTCH BROOM – Christy Carr**
The Lets Pull Together Scotch Broom program will finish the year before exhausting their funds.

**BEE HIVES – Charles Schafer**
The main source for bee nectar on Bainbridge Island is blackberry bushes. Increasing development and landscaping is diminishing the numbers of blackberry plants.
Climate change has impacted bees some of which have physically adapted to the changes in plant varieties.
Charles recommended growing edibles such as Thyme as ground cover but Bernie was concerned that children eating our vegetation may not be acceptable.

**CONTACT LIST;**

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Respectfully submitted by,
Dianne Speers