

GARDEN NEWS

Winter 2016



Ah Spring. Here today, gone tomorrow, back again? Enduring some crazy weather this winter, the garden had its ups and downs, but fortunately more ups than downs when it came to student learning!

From Amaryllis bulbs to sowing greenhouse Zinnia seeds, students continued to engage in garden-based learning even during the cold months. Indeed, the winter months are perfect for growing plants 'up close and personal' in the classroom or greenhouse. Winter is also a time for observing what some call the 'bones' of a landscape: the structural elements or shapes of tree limbs, shrubs and diverse seed pods!

Before delving into the positives, a few winter downsides of note. Despite high hopes for covered beds, the unseasonably warm December temperatures made

ABOVE: 3rd graders tap Haldane's trees and collect sap as they continue work on their Maple Sugaring project in February. Stay tuned for a Maple Syrup Cafeteria Pancake Lunch in May to celebrate Haldane's first Maple Sugaring Project!



seeds sown beneath outdoor row covers sprout prematurely, then die off from hard frosts. Some spinach managed to survive and some lettuce waited to sprout, but not the best weather to pilot row covers. There's always next year though!

Squirrels and mice discovered the shed this winter, wreaking general havoc and destroying seed pods and plant materials being saved: ears of corn? Gone. Birdseed? Forget about it! Secure shed eaves on Garden Committee to-do list? You betcha!

The garden also lost one of its beloved old **Ash Trees** (*Fraxinus pennsylvanica* of olive plant family Oleaceae). The tree had been in decline for some time but fortunately its sibling - the other majestic Green Ash - will be with students a while longer. The old Ash stump will become an outdoor table and gathering space in the garden now, allowing students to count tree rings and gauge its age. Guesses?! Thanks go out to Mike Twardy and Dr. Bowers for their careful consideration in reviewing the health of both these beautiful old trees.

RIGHT:
*Local Cub
Scout Pack
137 Den 4
Tigers
plant a
dormant
Honeycrisp
apple tree
to be
espaliered
in a flat
plane
against a
brick wall
in the
garden.*



As for the positives... Cub Scout Pack 137's Den 4 Tigers planted an **Apple Tree** in the garden's courtyard! *Malus domestica* 'Honeycrisp' (of rose plant family Rosaceae) will be espaliered or trained to grow against the school's brick wall. The scouts earned both a badge and big thanks from Growing Haldane!



And who can forget the recent '**Haldane's Got Talent!**' show at the Towne Crier with Growing Haldane's Sandy McKelvey and Carolyn Llewellyn? Rave reviews for Sandy's song parody of Meghan Trainor's *Better When I'm Dancin'* tune appropriately titled: *Tastes Better When You Grow It!* And the group sure grew this year! Haldane parent Connie Rotardier joined on choreography while ten Haldane students sang and danced, showing their great appreciation for HSF funding garden and Farm to School initiatives.

LEFT: Students perform in the 'Haldane's Got Talent!' show at the Towne Crier Cafe.

Winter Amaryllis Highlights

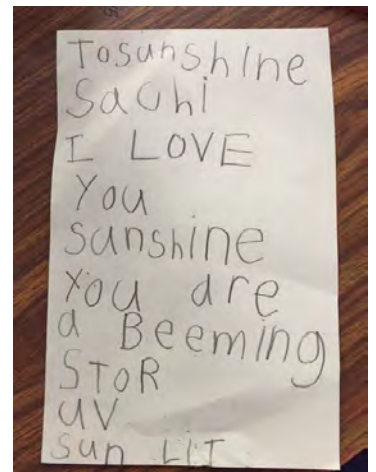
This January elementary grades again received amaryllis bulbs, with 1st through 5th receiving two bulbs: one new and one saved from last year. While the majority of new bulbs bloomed, there were a few duds, and not all of last year's bulbs repeat-bloomed. But some lucky classes got two healthy, blooming bulbs to observe and compare! Some reports from teachers:

Ms. Cretara's K students wrote letters to their bulb "Sunshine" and measured her amazing growth. "I love you Sunshine you are a beaming star of sunlight!" wrote one enthusiastic student. **Mrs. Quick's** first graders created their own posters in small groups, with each group responsible for observing and recording information about the bulbs. **Ms. Isler's** second graders were thrilled to have a second bulb to watch and discussed in depth how it was different/like the first one that bloomed.

Grade-level certificates were awarded before spring break to K-4 in various categories such as first bloom, tallest stalk, best name, etc. Tallest stalk across grades went to Mrs. Jennings' class bulb (named BB9) at 18 inches! Ms. Isler's bulb (named Red Ribbon) had the most stalks (3!) and flower buds (10 wow!) and Mrs. Moeller's bulb won the award for weirdest/most stunted bloom ever. Mrs. Wilde's students even won most innovative use by planting their bulb in marbles and water!

Names students gave class bulbs...

Dasher and Comet
Coconut and Lily
Marilla and Amethyst
Rosie and Roja
Firework and Starburst
Scarlet and Chewbakkah
Elvis Presley and Michael Jackson
Pinky Pie, Redness, and Sunshine
BB8 and BB9
Ms. White Pelican and Mr. Spike





Winter Lessons

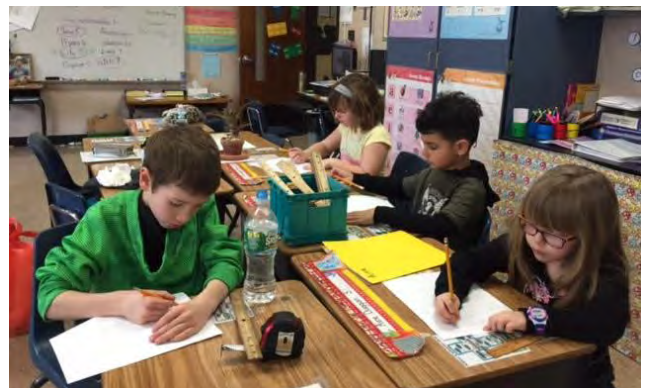
Kindergarten: In December, kindergartners enjoyed some aromatherapy and some history of medicinal plants. Using cloves and oranges they created beautiful, scented pomanders. These traditional holiday decorations originated as medicine to ward off the bubonic plague. And they do boost immunity and prevent sickness! In fact, one student who wasn't feeling well perked up shortly after the lesson started, saying the smell made her feel better! **Mrs. Wilde's** class was treated to an early spring walk with accomplished birder **Gary Van Asselt** from Haldane's grounds/maintenance crew. Gary took students on an outdoor walk to learn to Bird by Sight and Bird by Ear. He shared binoculars, birding books and magazines, and showed the students his personal bird log. For over 40 years Gary has documented more than 400 birds, noting where and when he's seen them. These Kindergartners were inspired and look forward to another birding walk with Gary when the warm-weather birds have all returned.



First: **Mrs. Jennings's** first graders partnered with **Mr. Wick's** 6th grade eco class to sow some ELA-based fairytale seeds in the greenhouse this winter: Rapunzel greens (aka lettuce and spinach) and Princess peas! They also sowed Jack and the Beanstalk beans in cups to grow along their classroom windowsill. 6th grade cared for the first grade greenhouse trays, which soon grew into an edible crop. First graders sampled sprouting pea shoots (sharing this particular taste test with **Mr. Harrington** of Principal and the Pea fame) and later harvested their spinach and lettuce greens to eat their own official "Fairytale Salad"! In March **Mrs. Quick's** students also planted magic bean seeds in cups and listened to poems about garden fairies, gnomes, and leprechauns. They hunted for lucky shamrocks in the garden and planted St Patrick's Day sugar snap peas, learning (like Jennings' class did) about different ways plants climb: reaching/grabbing (pea tendrils), wrapping/twining (bean stems), and sticking/suctioning (English Ivy 'feet').



Second: In January, **Mr. Peparo's** students started planning their summer gardens: real or imagined! These second graders had to creatively determine garden space, select which plants they wanted to grow, and use rulers to ensure future seeds sown would be spaced properly. Over winter they also planted shamrock seeds in "pots of gold" and had a lesson introducing them to one very cool group of plants: succulents!



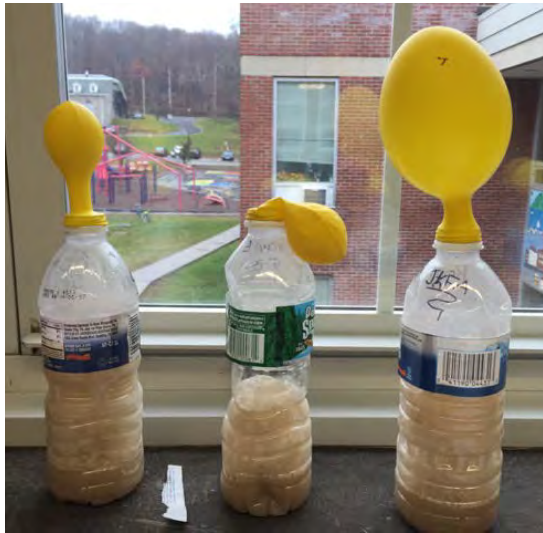
Third: Once again, third graders received Bonnie Cabbage plants to take home and each class planted one cabbage in the school garden. The Bonnie Plants Cabbage Program is a wonderful way to engage children's interest in agriculture while teaching them not only the basics of gardening but the importance of food systems and growing your own. For contest info visit: <http://bonniecabbageprogram.com> and may the biggest and best cabbage win!



Fourth: 4th grade classes put their math skills to work learning about snowflakes this winter. Students used their protractors and knowledge of angles to create lovely, symmetrically six-sided snowflakes. The resulting blizzards in each room were both beautiful and educational. And not too cold! Some of **Mrs. Hartford's** students have also spent the winter researching what colonial era gardens looked like and which plants early American Colonists would have grown.



Fifth: 5th graders studying the micro world learned all about the Microbes We Live With: the good, the bad, and the ugly! Students took out their microscopes and looked at soil samples from the garden, then they mixed yeast with sugar, water, and flour and got to see these microscopic organisms grow before their very eyes. One sample had sugar while the other did not. Can you guess which grew faster? Why? Ever wonder why yeast makes bread rise? Try this experiment with yeast, sugar, flour and water in a plastic bottle: mix the ingredients and quickly cover bottle with a balloon. Then watch what happens!



RIGHT: Fifth grade students use microscopes to examine soil samples from the garden, assisted by Principal Harrington. BELOW: Hydroponic experiment stations.



Sixth: Mr. Wick's 6th grade Eco Class explored hydroponic growing systems this winter and built a floating raft system in the greenhouse! They planted spinach, basil, and lettuce. Four weeks later... they had a big harvest and enjoyed a fresh green salad in the classroom, proving we can eat local even when it's too cold to grow food outdoors! Students also sowed other annual veggies and flowers in the greenhouse for spring transplanting to the garden (tomatoes, peppers, kale, broccoli, zinnias, etc.).



Agricultural Literacy Week (ALW)

In celebration of New York agriculture each March, volunteers throughout the state read a book with an agricultural theme to second graders, followed by a hands-on lesson. The book is donated to the school or classroom library with a bookplate recognizing the donor and NY ALW. This year 4H volunteer **Sandy McKelvey** visited Haldane 2nd graders to read The Apple Orchard Riddle by Barbara McNamara, then lead students in an activity about apples and oxidation. What makes apples turn brown and how to prevent this? Students learned oxidation happens when a cut apple is exposed to air. Using lemon juice, salt, and plain water to see what works to slow down the oxidation process, they learned the browning on cut apples is actually a protective barrier or natural defense mechanism to fight against bacteria and fungus.

Authentic Learning Projects

Mrs. Scrocca's 3rd graders continued to pilot a new authentic learning project over winter: **Maple Sugaring** in Haldane's own Sugar Bush! Students learned how to identify sugar maple trees by looking closely at leaves and tree bark. They tagged 10 identified trees and measured circumference to determine estimated age. Then with the help of Perry Pitt from the Putnam Valley Audubon Society and John Zuvik from Little Stony Point's Citizen's Association, the students tapped the trees. For one week they collected and measured the amount of sap from each tree, noting in their logbooks the weather conditions, temperature, and amount collected. **Kindergartners** also had an opportunity to visit Haldane's Sugar Bush and taste the cool, sweet sap dripping from the trees. It was an excellent introductory lesson before their trip to see Taconic Outdoor Education Center's (TOEC) maple syrup processing operation. With the help of **Mr. Wick's 6th grade Eco Class**, Mrs. Scrocca's students collected over 40 gallons of sap... which boiled down to just one gallon of syrup! A big thank you goes out to John Stole from TOEC for collecting the sap, boiling it down, and returning the liquid gold for Mrs. Scrocca's student to take home. Thanks go out to **Sandy McKelvey** for developing and coordinating this project. Stay tuned for a Maple Syrup Cafeteria Pancake Lunch in May to celebrate Haldane's first Maple Sugaring Project!



Mrs. Hartford's 4th graders moved forward with plans to revamp the garden's compost system this winter, continuing to harvest and relocate finished compost in the garden and clearing the existing area for construction. Parent volunteer **Jeff Silverstein** will work with the class this spring to build the new three-bin system students researched and designed themselves, to be presented at Discovery Night in May. **Glynwood** donated wood for the project: thanks go out to Haldane parent and Glynwood employee **Mark Tippet** for coordinating donation and delivery of lumber. Thanks also to **Carolyn Llewellyn** for her weekly garden help with this project.



Farm to School Update

Haldane's Got Local Beef! Every Wednesday beginning in February through the end of the school year Haldane's cafeteria is serving **local, grass-fed organic beef** in the pasta with meat sauce. Last fall's Family Pasta Night Farm to School Fundraiser raised enough money to purchase Glynwood beef to last till June!

Farm to School's featured veggies this winter included kale, broccoli, potatoes and beets. As always, students enjoyed eating these crops in different forms, learning about the different varieties and cultural history of each vegetable with Haldane's **Farmer in the Classroom**. Highlights included making beet-print valentines, discovering the importance of having many different potato varieties (since monocropping lead to the great Irish Potato Famine) and investigating a garden kale plant that had flowered and produced seedpods. Farmer in the Classroom is followed by the **Chef in the Classroom** program, followed by a monthly vegetable featured dish served in the cafeteria for all to sample and enjoy!

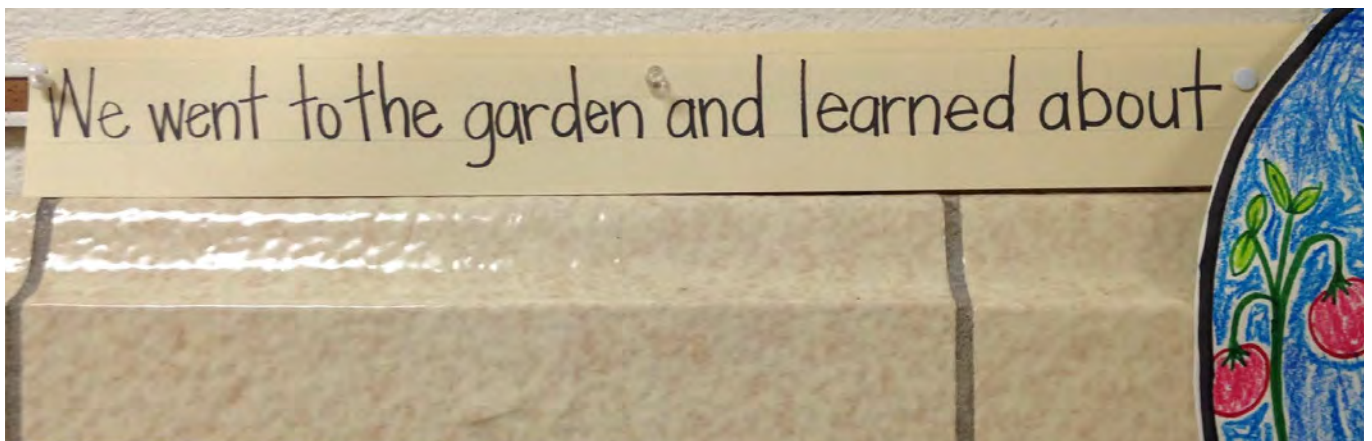


LOOKING ahead...

- Farm to School and Growing Haldane will be at May 6th **Health Fair** and May 19th **Discovery Night**.
- 2016-17 school **garden map** (attached!) with new raised and theme bed assignments. **Please note:** this year raised beds will not be assigned to specific grade levels in attempt to maximize growing space so more 'plant mass' is harvestable for more students to taste/cook with/use in class projects.
- **Maple Syrup Pancake Cafeteria Lunch** tbd in May to celebrate Haldane's first Maple Sugaring Project!
- **Garden Recess** returns Wednesdays this spring for 4th/5th graders thanks to Carolyn Llewellyn.
- **2nd annual Strawberry Fest** coming in June for grades K-5...

BIG THANKS to...

- **Haldane PTA** for their ongoing 'umbrella support' of the garden, along with **HSF** and **HHLT** also for ongoing support and original garden start-up grants!
- **Sandy McKelvey, Carolyn Llewellyn, and Connie Rotardier** for wonderful talent show act, including following students: May Columb, Kate Meisner, Elaine Llewellyn, Sophie Sabin, Josephine Foley-Hedland, Micah Morales, Ranger McElhattan, Robert Freimark, Ethan Hall, and Luke Tippett.
- Pack 137 Den 4 **Tiger Cub Scouts** for Apple Tree planting; **Jennifer Zwarich** for tree donation and **Pam Gunther** for coordinating.
- **Glynwood** and **Mark Tippet** for coordinating delivery and donation of lumber for compost project.
- **Pete and Bill Salmansohn** for their generous contributions to Haldane garden education!
- PGC member **Annie Patton** for donating some great gardening books.
- **Gary Van Asselt** for teaching Mrs. Wilde's Kindergartners all about birding!
- **Perry Pitt** from the Putnam Valley Audubon Society, **John Zuvik** from Little Stony Point's Citizen's Association, and **John Stole** from TOEC for helping with 3rd grade Maple Sugaring.
- **Laurel Rimmer** and **Wave Hill Garden** for once again donating willow branches for the garden's vine fort!

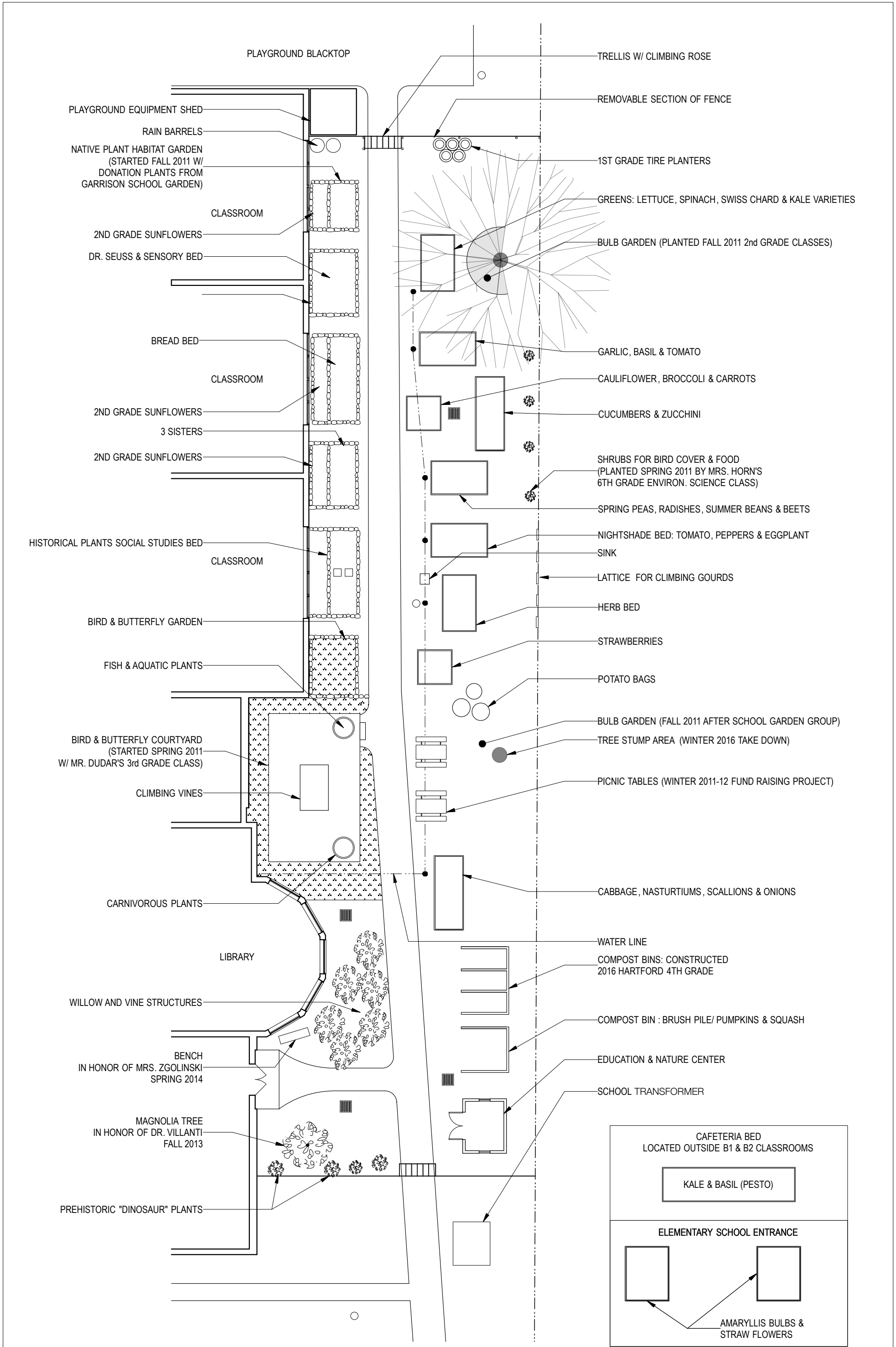




The Haldane Garden Committee is: Beth Sigler, Melissa Angier, Carina Frantz, Kathy Gordineer, Jennifer Zwarich, Alex Dubroff, Fiona Fortuna, Kory Riesterer, Carolyn Llewellyn, Sandy McKelvey, Shawna Chandler, Bettina Utz.

info@growinghaldane.com www.growinghaldane.com facebook/growinghaldane

grow your mind
HALDANE SCHOOL GARDEN



HALDANE SCHOOL GARDEN PLAN SPRING 2016