

Fairchild's Connect to Protect Network

If you are a teacher considering creating a native plant garden at your school, here is some advice from veteran Miami-Dade teachers who have managed to create successful gardens. We applaud these amazing teachers—and their students—for their work!



**Lisset Perez-Munoz,
West Miami Middle School**

- 1. Make sure you know what your main goal is for the pine rockland garden.** If it is flowers and beauty, make sure you plant those plants specific to that and ensure that you or the students weed and maintain them for aesthetics. (Warning: Beauty is relevant. It is hard to convince others that the beautiful endangered *Bletia purpurea* which is not constantly in flower is always beautiful. Getting that message across can be difficult and is usually not the best reason to plant a school garden.)
- 2. Make connections with scientists and organizations that will validate and make your garden valuable to the community.** Connect to Protect, Native plant societies, and other organizations that are willing to contribute, aid and help identify the value of your garden is vital for its long success. Reach out, ask the experts for help. I've been very blessed and I reach out often.
- 3. Communicate with everyone why native gardens are important.** Teaching students about the gardens and having the students communicate that through student projects is key. My students make native garden maps, make pamphlets, record videos about the gardens, make videos about specific plants, grow seeds and conduct experiments based on our Pine Rocklands. Making sure administration, grounds keep, fellow colleagues, and students are aware is crucial for its existence. Make sure that they are aware that natives attract wildlife, bees, butterflies, and if you are lucky, the occasional harmless rat snake can be your ally.
- 4. Keep it manageable.** If it is too big and you cannot weed, trim, and maintain with your students, it is more likely to fail. If you have a huge garden like we do, make sure administration knows that nature is in control in the summer and that you and the students will be back hard at work in the dry season. As the garden grows, it should become easier to manage and you should be able to attract more students help maintain it.
- 5. Add a barrier if possible.** Rocks, wood or even concrete help define an area. I continuously ask to make sure new lawn services is aware that they are to keep out of the gardens. That proves to be best in my case. Use signage. Have the kids make labels and identify the area. That often helps.
- 6. Weeding is essential and can be a challenge.** Learn your native plants. Keep area small and add as you learn more about the plants. Know what you planted. I assign students a plant to weed, tell them to walk around with a piece of that plant in their left hand if they are right handed, compare and only pull that plant from the root. Some plants I assign the students to cut to not disturb the soil. **Recruit weeders whenever possible.** The more you educate your fellow coworkers and the students, the more help you will have with the gardens. Sometimes a Saturday workday for extra-credit is necessary.
- 7. Add plants with new students.** I place flags on each new planting to remind students what needs to be watered. I usually do not remove the flags, which helps remind me that there's a plant there if

weeding is needed. Additionally, I place a rock close to the plants stem and have the students pour the water on the rock to reduce disturbing the soil. I also have the students create a mote with rocks and soil to keep the water in the intended place. Watering can be a challenge, but it can lead into other projects on water conservation.

- 8. Watering.** As for how much to water when it is hot in South Florida, I usually tell the kids to water generously every day the 1st week, every 2 days the 2nd week, every 3 days the 3rd week, every 4 days the 4th week and once a week until the rains come. I like to take pictures of the kids with the plants and take pictures of the students after a few years to show growth in both. It can be very rewarding.
- 9. Garden work is not punishment.** Many times I hear people say, “put them to work.” Changing that misconception into valuing the garden for its importance to nature, wildlife and our community is crucial in keeping the garden in a positive light. My students love helping me go out to weed. Just remember to remind them of the rules, take water, secure the area, and have them use gloves, take before and after pictures, and have fun.



**Ann Martinez,
MAST Academy High School**

Ann Martinez:

1. Ask the principal which land they are willing to give you for the garden. Make sure to ask the principal if she foresees any other future use for the space. It is better if the area is not too close to an area that is heavily walked upon by students.
2. Post signs outside of your garden so that parents are aware that it is a garden and not just a bunch of unkempt weeds/ plants. This is especially important because native gardens and butterfly gardens often do not look like landscaped areas.
3. Start off with a small garden that you are sure you and your kids will be able to weed, water (when needed) and maintain. Do not expect the lawn service or janitors to weed your garden for you, they will just mow over plants or hit them with the weed eater. Make sure you mark where your garden begins by using wood or rocks and make sure you talk to the lawn care company directly and tell them they are not to go into that area or spray any weed killers or any other chemicals in the garden. You can usually ask your principal to discuss the importance of this with the head custodian which will also talk to the lawn care people.
4. Research which plants you are placing in your garden (and try using natives!!!). Try to pick plants that are resilient, do not need long term watering, and are host plants. For example, coontie are host plants for the atala and are drought tolerant. Make sure not to pick plants that have really big spines or plants that are known allergens to students. Also, try to pick a variety of plants so that it attracts a variety of living things to your garden. Make sure you do not plant invasive plants.
5. Every year I have been at MAST I have added another garden area. I do this by having an Earth Day event at my school and inviting other science classes to help plant trees. It gets more students

involved as they notice how much effort is involved. Just make sure that you explain to each class that goes out there the proper steps for planting the new tree. Also, make sure that the teacher accompanying the class is willing and able to help supervise the students when they are planting AND that the teacher that is supervising also knows how to plant the trees. In addition, I have the students that are in my Environmental Action Club supervising the other students and giving them advice. I also ask the students to call over the teacher or one of my club members over after they have dug their hole, so we can make sure that the hole is deep enough and that the students spread out the roots. Make sure you have enough mulch for your new plants. It also helps to have a few extra bags of soil. I provide students with a clip board that has a paper with the steps that they need to follow. Once they have planted, I have students make initial measurements of the plants so that they can be monitored.

6. For larger trees, purchase tree guards. The tree guards help prevent injuries from weed eaters.
7. Have students monitor new plants with flags of one color. Flags for older plants that still need monitoring can be a different color.
8. Walk through your garden and inspect it before kids start working in that area. Make sure there are no wasp nests, red ant piles, or other major problems. For example, we have a seasonal caterpillar that if it touches students skin will feel worse than a wasp sting. I usually do a quick check to make sure it is not in season before I have students working in the garden.
10. Provide students with written instructions on the dangers of working in the garden and have parent sign a consent form.
11. Provide students with written instructions on how to plant a new plant and make sure you review the steps with the students prior to taking them outside.
12. Teach students about the importance of butterfly gardens and corridors BEFORE Earth Day or before your planting event. I usually also give them a participation grade based on how well they followed the instructions of how to plant the plants.
13. Make sure to do activities using the garden and that your administrators know the activities that you do in the garden. For example, our school participates in different competitions like the Fairchild Challenge, Key Challenge, etc. and when possible we use the garden for those competitions. Plus, our science classes use the gardens to do labs about adaptations, biodiversity, symbiotic relationships, and other observational studies about wildlife and plants.
14. Talk to PTA, EESAC, and your principal (or have one of your students that works in the garden talk to) and let them know your plans for the garden. Develop a list of plants that you want in the garden and the tools you need and include their prices. Provide them with an estimate on how much money you are requesting from them. Make sure to describe the benefits of the garden and how your garden will be used by your class and others. Also, inform them if you have done some fund raising, grants, or have obtained money or plants from other sources. I find that PTA and EESAC are more willing to provide funds when they know that you have tried other ways of obtaining funding.

15. I provide students and parents with a gardening tips/ warning sheet and require a parent's signature. I have attached that document along with the instructions I provide students for planting. (see attached document)



**Andrew Kearns,
Jose Marti MAST**

Establishment of a school garden

- 1) Identify a location (with alternates) at the school site for the garden before proposing the garden.
- 2) Make specific connections between the garden project and curriculum. While aesthetic purposes are personally sufficient, the probability of a successful garden proposal to administration increases if there is an academic purpose as well. (The more grade levels/course curricula addressed, the better!)
- 3) Recruit other faculty and staff to support your proposal so that the garden project has school-wide support.
- 4) Identify funding sources prior to presenting your proposal. Even partial funding or completed grant applications imply a sense of ownership for the project.
- 5) Design the initial phase of the garden such that it is manageable. A small project can grow after approval. Large projects that may be difficult to manage may not be approved.

Maintenance of the garden

- 1) Seek assistance from many sources. Make maintenance a team effort among faculty, staff, and students.
- 2) For staff, include and inform custodians who maintain the school grounds. If they are unable to take specific care of the garden, identify minimum chores that they may complete. At very least, inform them of actions that should be avoided.
- 3) For students, create a specific club (or class or special) with a purpose of performing garden maintenance. Make activities fun and challenge students to complete tasks safely and effectively.
- 4) Also for students, get permission forms signed by parents so they are aware of physical activities performed.
- 5) For faculty, involve curricula that include multiple standards. Invite faculty to participate in maintenance, but temper expectations.
- 6) To sustain your garden over time, inform administration of progress and academic use. Use social media to post regular updates and tag district, region, and school users.
- 7) Seek community resources (stores and businesses) that can assist in material needs over time.