## Monarch Butterfly Garden Proposal

One mission of our school's Green Club is to enrich the lives of our students, in academics, health and spirit. We have built four gardens in the last three years to help us do this; a vegetable garden, a food forest, a schoolyard habitat and a native Virginia wildlife garden. We planted a milkweed plant two years ago in the wildlife garden, and last year we had more than thirty. In those couple of years, our Biology and our Head Start classes have watched as the milkweed grew, flowered and produced seeds. In addition to this, students with special needs, such as Autism and Anxiety disorders have benefitted from the tranquil sensory exploration that occurs in the gardens. We've seen the Monarchs visit, feed, lay eggs, hatch, feed some more and pupate. In one week last Fall, twelve classes of ninth graders saw dozens of Monarch Butterflies stretch their wings for the first time and fly to Mexico. It was then that several students asked about planting more milkweed for a garden designed to help conserve and grow the monarch populations.

Our School is an International Baccalaureate school, so we are always looking for ways in which we are connected to others in our world: to people, places and the natural world. The plight of the Monarchs have really captured their interests. Students in the Green Club, with the help of our local Master Naturalists and our Virginia Native Plant Society, have researched what is necessary for Monarch Butterfly gardens and have chosen a sunny hillside across from the other gardens. In this way, they will be able to maintain this garden along with the others. The proximity to the other gardens and the size will allow more students access to study the ecology of the Monarchs. Students from Ecology, Environmental Sciences and Environmental Systems will be able to join the Biology classes.

We have also, this year, received a grant to buy interactive plant signs. These signs have QR codes which link to the Plantsmap website on which we are putting information about the biology, ecology and primary source links to historical uses of our plants. We will be including these in our Monarch Garden. Not only will this information cover state standards for our science classes, students will be able to design their own experiments using information and data collected and input into the website. Our senior Higher Level Biology students spend a month designing and collecting data for their own original experiments. We can see a Monarch Garden and all of the data resources available along the Monarch migration route leading to some creative and important work.

Our Green Club students have had Girl Scout Troops visit the gardens to help them earn badges. This garden will give them opportunity to earn more and different badges. We discovered the JourneyNorth website this Fall and have registered to share data this year and we hope to be able to become a registered Monarch Waystation with this garden. We have even started experimenting with Google Tour Creator to get our students involved in their natural world, and we can see this really motivating many more students. We are very excited to be a part of the conservation of these beautiful and important creatures.