

2012 April Plant of the Month



Garlic Mustard

***Alliaria officinalis* Andrz.**

Non-native plants are a theme presented in April's plants posts to make our audience aware of the impact alien flora has on our ecosystems.

A great example is the biennial Garlic Mustard, a non-native known to most plant enthusiasts. This plant occupies rich and marginal moist soils wherever there was disturbance. Once seed is cast in late spring, seedlings emerge and stay a basal rosette until the following spring. Garlic mustard is found in all of our northern counties and has expanded south throughout the Delaware Valley. Once limited to old farms and waste areas, the plant has found a home on our larger rivers and streams flood plains. Recent literature links this plant with a distribution of non-native earth worms. Garlic mustard appears to follow the destructive soil churning created by a suite of invertebrate animals encountering a virgin soil environment. It is thought nitrogen cast by worms and their disturbance creates the nutrient rich environment sought by garlic mustard. Anyone familiar with the Valley River floodplain north of Trenton knows this environment. Most organic matter is quickly converted by the worms, creating a perpetual disturbance. Once established, it is a real challenge to eliminate, thus providing an opportunity to become an established colonizer. Once present its quick growth and larger size out competes our native herbs and seedlings. This makes garlic mustard a NJ flora constituent with a distinct lineage and notorious habit.