Name _____

Date _____

Reproductive Strategies

Plant Profile:
MEADOW GARLIC
(Liliaceae: *Allium canadense*)

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Long before settlers ventured into North America with their European garlic and onions, Native Americans were likely spicing-up their cooking with a native garlic known as meadow garlic. This garlic, called *Allium canadense* by botanists, grows wild from Florida to Canada. Surprisingly, it belongs to the same family as garden-variety lilies - those big colorful flowers that perch in flower vases and add splashes of color to many gardens around the world. Even though it's called meadow garlic, it really smells and tastes more like an onion. Rubbing the leaves and stems emits a definite bad breath, onion smell.

Meadow garlic, also known as wild garlic, grows from bulbs like other lilies in its family. The bulbs lie dormant underground over winter, storing energy for the burst of growth and reproduction that comes in spring and early summer. Bees aren't turned off by the onion smell, and they buzz around pollinating the small, pink or white flowers. Although each flower has both male and female reproductive parts, it can't mate with itself. The bees are needed to move pollen from one plant to another. This produces fertile seeds that eventually disperse and grow into new plants that have a mix of genes from the two parent plants.

But meadow garlic doesn't only depend on bees or other pollinators to spread itself around. Perched underneath the flowers are clusters of little, nubby growths called bulblets. The bulblets are outgrowths of the plant, and when dropped, sprout into new plants identical to their parent. The bublets provide enough start-up energy for the new plants to grow and eventually produce flowers and bulblets of their own. The ability of plants in the lily family to reproduce both with and without fertilization means they can spread easily. Some lilies have actually become pests by taking over pastures, gardens, and roadsides across the country.