

The Hitchhikers of Autumn



Many plants found in Illinois rely on specific dispersal strategies to send their seeds off to distant lands to establish new populations and to mix genetic diversity with other plants. Populations of plants would struggle to exist if all of their seeds simply fell straight to the ground, never to wander away from the parent. Fortunately, many plants have developed amazing “tricks” to transport their seeds elsewhere.


Some plants, such as the common dandelion or milkweed, wait for a breeze to carry away their feather-light “sails” connected to each seed. Other plants produce tasty fruits surrounding their seeds, thereby enticing animals to eat the fruits—then deposit that seed elsewhere. But did you know one

seed dispersal design, the hooked seed, was responsible for the invention of Velcro?

Meet the hitchhikers of the plant world. These barbed seeds employ a dispersal strategy that hooks onto anything that brushes against the mature seed. The fur of passing animals (or human clothing) eventually becomes a courier for these hitchhikers each autumn. Some of these hitchhiking seeds feature sharp spines. Others feature soft hooks, while others have microscopic, velvety curls of fuzz that stick to almost anything.

There are many species of plants in Illinois that produce hitchhiking seeds,

including a species of burdock (commonly called a burr) that provided the inspiration for Velcro. Swiss hunter George de Mestral became fascinated by the structure of the burrs he pulled off himself and his dog after returning from the field one day in the 1940s. After much trial and error, the nylon hooks and loops he developed was granted a patent in 1955 for what we know today as Velcro.

Look closely at the various plant seeds on this page. All can be found in Illinois (although not all are native plants). Notice how their shape is perfectly adapted to spear, snag or hook anything that wanders by—including you. 

Answers: A. burdock, B. beggar's lice, C. black snakeroot, D. white avens