

A photograph of a forest floor covered in a dense carpet of green Ramps (Allium tricoccum). The plants have broad, lance-shaped leaves and some are beginning to show yellowish-green flower stalks. In the background, a dense forest of tall, thin trees with green foliage is visible. A large red diagonal shape cuts across the lower-left portion of the image, serving as a background for the text.

Grow
Manage
Harvest

Series No. 2

RAMPS

Allium tricoccum

Cornell Cooperative Extension
Columbia and Greene Counties



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Introduction to Ramps

Allium tricoccum, commonly known as ramps, are an edible woodland plant that grows throughout the northeast and Appalachia. Rising in popularity with chefs and food connoisseurs, this plant is making a meteoric rise on menus, at farmers markets, and specialty food markets. While ramps can be plentiful, they are slow growing and their wild populations can be easily damaged from over-harvesting. Sustainable harvesting practices can help secure your local sources long-term. This species can also be supported by planting it in your woods resulting in a perennial supply.

General Characteristics

Ramps, also known as wild onions or wild leeks, are a native understory plant that grow in most Northeast woodlands. They are in the allium, or onion, family. Like garden onions, they have a familiar onion-smell and the entire plant is edible. Aside from these shared traits, ramps are unique compared to conventional varieties.

Ramps are perennial, meaning the same plants continue to grow and mature year-after-year. Ramps also fall in the spring ephemeral category – emerging in early spring, flowering and then dying back to their roots by mid-summer.

These plants tend to grow and thrive in moist, rich woodland soils under the canopy of mixed hardwood trees. When they first emerge in the spring, they bask in the full sun exposure. As the surrounding trees leaf out and fill the canopy in May, mature plants shift to producing flowers and seeds as their leaves fall back. The flowers and seed heads can persist throughout the summer, providing plenty of opportunity for sighting and identifying.



Ramp leaves emerge from their underground bulbs in early spring. Photo by Tracey Testo, CCE Columbia Greene

Aside from being delicious, the most important characteristic from a conservation and harvesting perspective is they are a very slow growing plant. Ramps can take 7 or 8 years to reach reproductive maturity (producing flower and seeds)! This slow rate can be problematic for wild populations that are over-harvested for commercial sale or individual consumption. The bulbs are most commonly harvested and are used similarly to the bulb of an onion. Removing the bulb means that plant will die and must begin its life cycle from the beginning as a seed.

Growing Ramps

Understanding the life cycle of ramps is the most important step in successfully growing. When starting from a seed, ramps are tiny. The first leaf is as small as a blade of grass and will be that small for the first few years. After year 3 or so, it may start to resemble the leaf of a mature plant. After a few more years it will begin to develop a leaf pair, instead of just one. At 7 or 8 years, the plant is finally reaching maturity and will have the resources to start producing a flower and then seeds. As the plant grows in age, its seed production will increase. Older plants will start to produce up to three leaves and may divide its roots to create a new plant resulting in a clump.

Two plants are shown in this image, with one growing directly behind the other. Note that each plant has two leaves. This can give a rough indication of its age.

Photo by Tracey Testo, CCE Columbia Greene



To actually establish ramps, a common technique is cultivating using purchased seed or transplant material. Seeds and bulbs can be sourced from existing patches, but overharvesting is something to account for. Either practice can be used to establish a population. Access to a healthy patch of ramps for transplants is usually the deciding factor.

When choosing a site, look for well-drained soil with a consistent moisture. Ramps grow the best in this moist, rich soil with slight acidity. These conditions are often found in rich hardwood forests. Part shade, around 30 % is ideal for seedling establishment, as well as flower and seed development in later years.

To prepare a bed, remove debris, unwanted weeds and tree sprouts. Loosen the soil and incorporate organic matter like compost or shredded leaves.

Growing by Seed

While growing from seed can seem to be painstakingly slow, it is often the only option growers have to obtain plant material. An increasing number of vendors have begun keeping seed in stock due to demand. When establishing from seed, seek reputable sellers using sustainable methods.

Seeding is best done in prepared beds in the late summer to early fall from collected or purchased seed. Fresh seeds require a warm cycle followed by a cold cycle (mimicking summer and winter). This is called a stratification period that allows the seed to finish its development and break dormancy. This can be achieved through natural exposure to those seasons or by mimicking the seasons indoors with a refrigerator.

Sow seeds on top of your prepared bed and gently press into the soil. Cover with 2 to 4 inches of leaves. Moisture is critical at all stages of growth, making mulching an important step.



Two year old ramp plants growing in a forest garden (R) and a seedling pulled from that garden.
Photo by Tracey Testo CCE Columbia Greene

Growing by Transplant

Transplanting bulbs are the faster route and can be purchased or dug from wild populations. Keep in mind the importance of sustainable harvesting (read the following section to learn more). The best time for transplanting bulbs is between September and March, when the above ground parts of the plant are not active. February to March is the best window, just before they emerge. Plant bulbs 3 inches deep and roughly 4 to 6 inches apart.



4 clumps of ramps, with 4-5 plants per clump transplanted from a site that was being developed into a stream side area along with an Ostrich Fern.

Harvesting

Do not harvest any plants until they have filled the whole site, have large bulbs and have flowered. If whole plots are harvested at once and a grower is planning for continual harvest, it is recommended to have enough plots to allow for a 5 to 7 year rotation. If a portion of plots are harvested, only take one-fifth or one-seventh of your production area each year.

Ramps are harvested in the spring, when the leaves are up. The season is dependent on geographic location, with altitude being the largest influencer. In NYS, ramps begin emerging in lowlands in late March or early April. The season continues in higher mountainous regions into May. Prior to leaf emergence and after they have died back, the bulbs are soft and cannot be harvested

Tools for harvesting ramps vary by person and preference. A ramp 'digger' tool can be purchased or made. This hand tool is the size of a hammer, with a long, narrow head similar to a mattock. Other tools for digging include a garden hoe, a pick, and a soil knife. Great care needs to be taken to not damage the bulbs. After harvest, they need to be kept cool and moist. Diligent washing and trimming of roots is the final step before use or sale.



Read on in the following section on Sustainability to learn an alternative to digging roots.

Sustainability

As this plant is gaining popularity on the dinner plate, it is also on its way to becoming a plant of conservational concern. The short lived, fleeting nature of ramp season adds to the appeal as does the allure of eating something wild. What if there was an easy solution to this problem? A solution that would allow us to eat ramps without reducing their populations. Luckily, there is one! **Just eat the leaves.** That's right, the leaves have the same exact flavor found in the roots and can even be cooked like the bulb would be. This means only a piece of the plant has to be harvested, leaving the bulb in the ground to continue to grow. Now, it is important to recognize that harvesting leaves will reduce that plants ability to grow for that season. And taking from the same plant year after year will lead to a slow death. A few guidelines have been developed so leaves can be harvested with minimal impact.

1. Assess the health of the ramp population. Not sure what a health ramp patch looks like? Check out the images below in this section to see.
2. Look for evidence of other harvesters. Even in your own patch, in your own woods, others could have been there before you to dig or pick leaves.
3. Only take one leaf from a plant that has two or more leaves and remove less than 5% of the entire population.
4. Distribute the harvest through the patch instead of focusing on one area.



So, what does a healthy and an unhealthy population of ramps look like? Take a look at these images and the difference will become clear.

Look closely and you will see small patches of green along this wet wooded area. This is just beside a popular hiking trail in the Catskill Mountains. Roughly 5 years prior to this photo being taken, all of the ground shown was carpeted with ramps covering about an acre. Year after the year, the patch got smaller and smaller. This is evidence that more plants were being taken than nature could replace. This is all that remains. If the population is left alone, it could recover in about 10 years. Unfortunately, hikers passing by this patch are most likely unaware of this history and often think that they are the first to dig.



In comparison, look at the patches of green in this photo. Nearly the entire hillside is carpeted in ramps. This is a clear and healthy population. It exists in central NY on private property that is very well posted. This patch has been revisited for over 5 years and has not reduced in size.

Ecological Benefits

Ramp populations are a piece of a healthy forest ecosystem. They share habitats with many of our beloved spring wild flowers, their flowers feed native bees and flies, and their annual growth plays a role in nutrient cycling in the forest floor. Their dense carpeted populations hold soil near water ways and prevent invasions from non-native or invasive plants.



Ramp flowers
Photo credit: Fritz Flohr Reynolds



Shared Habitat with Spring Beauty
Photo Credit: Tracey Testo

Culinary Uses

Ramp bulbs and leaves can be used any way onions are used. Their flavor is distinct and they often deserve more attention in a dish compared to the average onion. Preservation techniques are often sought out to preserve this short lived season. For the bulbs, pickling is a favorite. For the leaves, preservation through drying, freezing or even fermenting can allow you to access these flavors all year long.



Photo Captions: Top picture, pickled ramp bulbs. Bottom left, ramp leaves packed on short ribs ready for the BBQ. Bottom right, ramp leaf kimchi. Photo credits: Tracey Testo, CCE Columbia Greene

References

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For more information, please visit:

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