



# Preliminary Results of the 2013 Virginia Tech Root Report

Bloodroot (*Sanguinaria canadensis*) Photo by Katie Trozzo 2013

The Department of Forest Resources and Environmental Conservation at Virginia Tech is working on a study of the medicinal plant trade as part of a larger effort to provide research and extension services for non-timber forest products. In 2014 we sent out a confidential, voluntary questionnaire to ginseng dealers on the other products they may have purchased in 2013. Our goal is to be able to estimate the annual output of some of the more commonly traded medicinal forest products and be able to see how production is distributed throughout the region.

## The Products

Our questionnaire focused on native medicinal plants other than ginseng that are harvested in forests. Of the registered ginseng dealers who responded to our survey, 61 percent reported buying other plant products. Our survey asked for specific data on 11 roots and one bark. Figure 1 shows the percentage of buyers who purchased each of these plants. The most commonly purchased products were goldenseal, bloodroot and black cohosh. Some participants listed other products not included in the survey. These included witch-hazel leaves and bark, wild cherry bark, stone root, sassafras, wild hydrangea and squaw vine. A few participants bought plants for the floral industry, but most dealt exclusively



Figure 1. Percent of surveyed dealers purchasing.

in medicinal products. With the exception of a small percentage of goldenseal, the products purchased by registered ginseng dealers were wild-harvested. Most buyers fit roughly into one of four categories: those who only bought ginseng, those who bought ginseng and purchased a few of the top products in small quantities, buyers who bought a variety of plants in greater volume directly from local harvesters, and regional aggregators who bought a variety of plants in greater volume but purchased most of their product from local buyers spread across the region.

## Product Volume

One of our project's goals is to provide an annual estimate for harvest volume for each of the botanicals in our survey. Many participants were concerned that last year's survey did not differentiate between volume purchased directly from harvesters and volume purchased from other buyers. We have corrected this in the upcoming survey, but we understand that total volume estimates from the 2014 survey may not reflect products being bought and sold more than once. For this reason we are not reporting total volume for the 2013 harvest year. We did want to give an idea of the relative volume of the different species. Figure 2 shows the percentage of total volume we recorded for each species adjusted for dry weight. The top products by volume were black cohosh, slippery elm bark and goldenseal. It is important to note that each of these products are unique, and a variety of factors may influence harvest totals. The size of the plant part used varies. Some are valuable while others are relatively inexpensive, and prices and consumer demand change from year to year. Some species are more common than others. This harvest volume alone does not reflect the size or condition of wild plant populations. It does illustrate their trade volume in relation to each other in 2013. As we continue the project we will be able to look at how trade volume changes from year to year, which many participants thought would be useful.

Percent of Total Volume by Product 2013

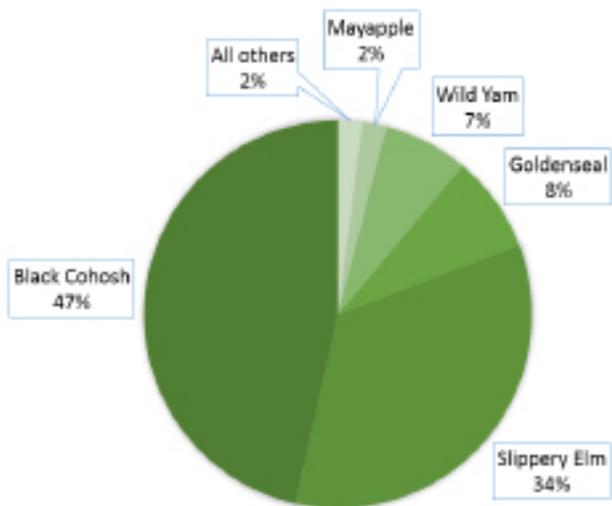


Figure 2. Percent of total volume by product, 2013

### Harvest Distribution

Our study is one of the first to look at the region-wide harvest distribution for these species. To keep product sourcing confidential we asked for origin by multi-county areas representing roughly the same amount of forest and similar terrain. Although there was minor variation with some of the less commonly traded species, most of the plants were coming from the same areas. Figure 3 shows the harvest distribution we recorded for black cohosh as an example. The greatest concentration was in eastern Kentucky and far southwest Virginia. West Virginia, which will be included in the next round of surveys, was also identified as an important supply source. In interviews, participants have offered a number of reasons why the harvest may be concentrated in certain areas. Some suggested that economic factors such as unemployment and other changes in the local economy may play a role. Others said that there was

Southeastern Black Cohosh Harvest Reported in 2013

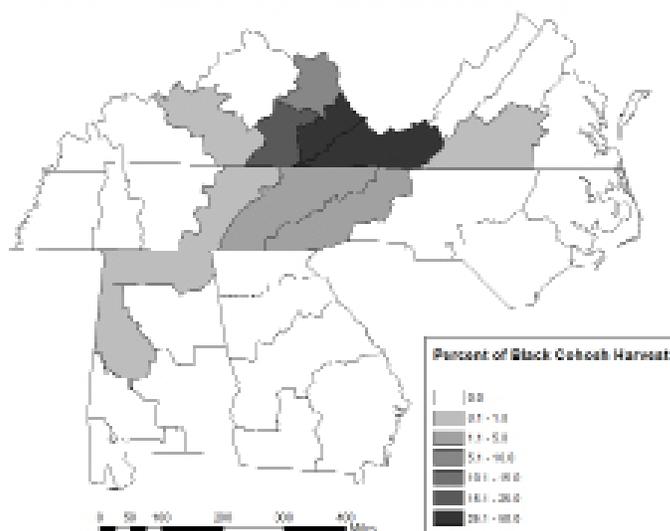


Figure 3. Southeastern black cohosh harvest, 2013

more ideal habitat in these areas, a stronger harvesting tradition, or that harvesters had more access to forests. As we move forward we will look into all these possible explanations in greater detail.

### Interviews

In addition to our questionnaire we have also been interviewing people who work in the root and herb trade. We want to thank those who have been willing to sit down and talk with us. These conversations help us improve our survey and understand the results. The people working with roots and herbs are the ones who know the history and current state of the business best. We believe your perspective is vital to our work. We are still compiling the interviews from last year and hope to continue with them over the summer and fall. If you would like to participate, you can contact us at any time for more information.



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False Unicorn (*Chamaelirium luteum*) Photo by Catherine Bukowski, 2013

