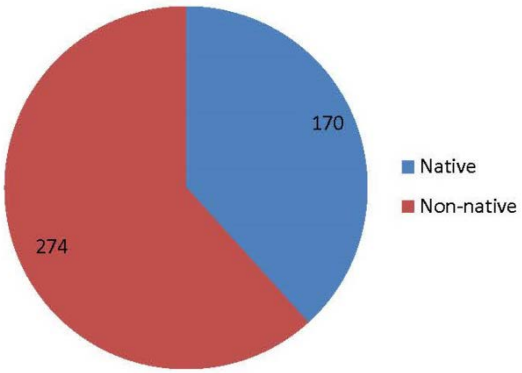
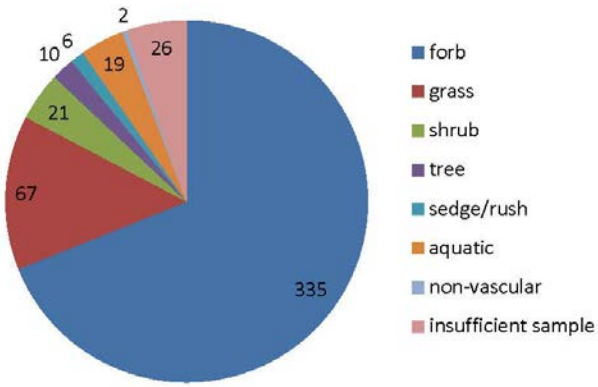
Plant Identification—To Know You Is To Love You

The ability to identify a plant is important for several reasons. From a vegetation management perspective, it is important to know a plant's identity so you can determine if it is a weed and the level of risk it poses to desired vegetation. Identification is especially important for early detection of new weeds that have never been documented in an area before and can be targeted for eradication. Plant identification is also important to determine if a plant is toxic, especially for people who raise livestock or harvest edible plants from the wild. Knowing what plant you or your animals are about to eat can become a matter of life or death. Finally, being able to identify a plant is just plain fun and a great way to impress your friends and family. Most people that spend a lot of time dealing with plants, including weedy plants, find that plant identification becomes something they grow to love and take great pride in being able to do.

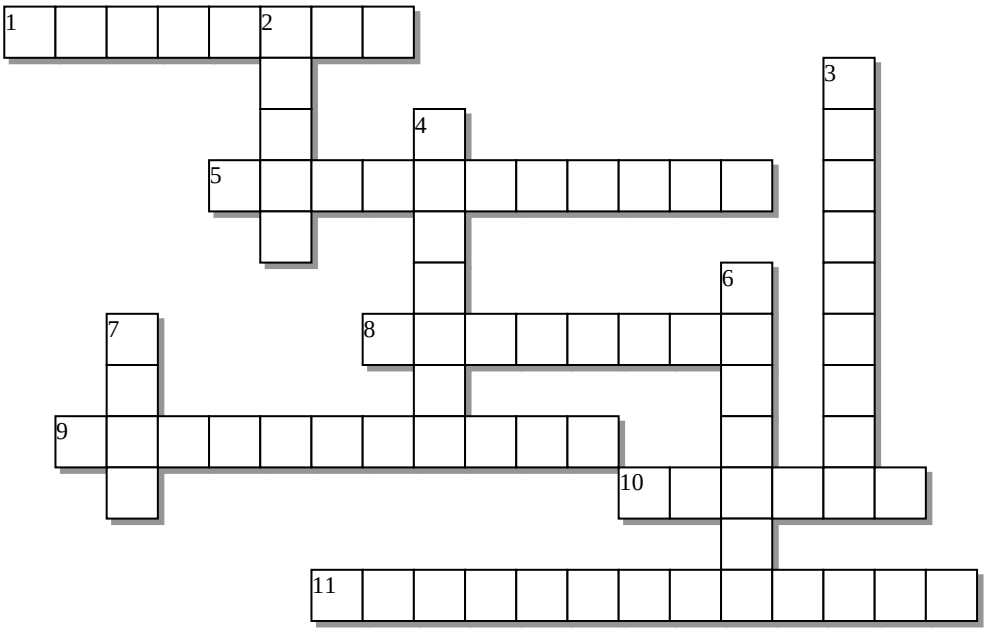
Plant identification can be challenging and even intimidating for the inexperienced. There are great resources to help you identity plants, though. One is a recently published MontGuide called "Plant Identification Basics" (http://msuextension.org/publications/AgandNaturalResources/MT201304AG.pdf). The publication walks the reader through eight questions to ask about a plant that will assist with speedy and accurate identification. Each question is accompanied by sketches that illustrate key features described in the question. The publication will be especially helpful if used in conjunction with your favorite field guide and will help you narrow down your choices so that you don't waste your time thumbing through the guide page by page until you happen to find a picture that looks similar to the plant you wish to identify.

Even if you try and try and still can't seem to come up with the identity of an unknown plant, you can get the plant identified for free at the MSU Schutter Diagnostic Lab (http://diagnostics.montana.edu/). The lab accepts unknown plants from clients across Montana (and even from other states and Canada), identifies them, and provides management recommendations at the client's request. Each year the lab processes around 500 plants. To give you a better idea of what unknown plants are being found across Montana, here is a rundown of what has been submitted to the lab in 2013: The majority of plants were non-native (see graph at right, top). Forbs made up the vast majority of unknown plants followed by grasses, shrubs, and aquatic species (see graph right, bottom). Twenty-four of the submissions were state-listed noxious weeds; one submission was the first ever record in Montana of the invasive forb garlic mustard (*Alliaria petiolata*), which is noxious in many states in the eastern half of the U.S. Twenty-nine plants were submitted to determine if they were toxic to livestock, five of which were. Ten were submitted by clients who planned to eat the plant, but wanted to verify it was safe. Four of those plants would have made the consumers very ill, a great example of why plant identification is so important! Nine of the submissions were new county records and were added to the Montana State University herbarium. These records help track how plants are moving across the state and their ability to tolerate different climate regimes and habitats. In spite of how much we already know about Montana plant communities, they continue to change and we learn new things about them every year!





Test Your Knowledge of Plant Identification



Across:

1 - _____ leaves are broadest in the middle and narrower at either end*

5 - Although it won't unlock the door to your house or car, this type of key is often used to unlock the identity of a plant

8 - Send plants to this lab to get help with identification

9 - This management goal is fitting for new weeds recently detected

10 - Stems of yellow starthistle are unique because they are pinched or _____*

11 - This plant was reported for the first time in Montana in the summer of 2013 (common name)

Down:

2 - Plant identification sometimes becomes a matter of life and death if the plant you or your livestock plan to eat is this

3 - Most of the plants submitted to the diagnostic lab in 2013 were _____

4 - One of the first questions you should ask about a plant when trying to identify it is whether it is a dicot or a _____*

6 - You can impress your _____ and family by being a plant identification superstar!

7 - Even though grasses seem to be the most prevalent plant form in Montana, this type of plant was submitted for identification the most often

*Refer to Extension MontGuide "Plant Identification Basics" for answer.

Solutions are posted to the MSU Extension Invasive Rangeland Weed website:
http://www.msuextension.org/invasiveplantsMangold/extensionsub.html

MONTANA STATE UNIVERSITY EXTENSION

Montana noxious weed Education Campaign