# Native Plant Trust RİGHT PLANT, RİGHT PLACE

Creating a successful, vibrant garden requires consideration of a number of factors including light conditions, soil types, degree of moisture, and plant behavior. The first three factors can be summarized as the cultural requirements for the plant while the last factor involves some understanding of the ecology and plant succession. New plantings will require extra care and attention for the first few seasons, but the time spent caring for those plantings will wane if matched well to the site conditions. The end goal is to place the right native plant in the best spot possible for it in your garden so that it will establish and after a few years no longer need supplemental water. This approach embraces a holistic and sustainable view of garden creation that avoids the need for excessive soil amendments, tree canopy manipulation and irrigation. Let us take a closer look at these factors.

## LIGHT CONDITIONS

Begin by observing light patterns in your garden over the course of several days. Make note of the orientation of your garden (ie south or west facing, etc.) If possible consider how light patterns change with the seasons (light in winter can be quite different than light conditions in summer) Here are four basic groupings:

Full sun Plants receive ten or more hours of direct summer sun

Part sun Plants receive five to ten hours of direct summer sun

Part shade Plants receive less than five hours of direct sun or at least half a day of shade

Full shade Plants receive one hour or less of direct sun but may receive filtered light for all or parts of the day

#### **SOIL TYPES**

All soils are made up of three basic components, sand, silt and clay. The proportions of each make up soil texture and this influences the soil structure as well as its ability to hold onto water and nutrients. An easy way to get acquainted with your soil texture is to rub a small amount between your fingers. Sandy soil feels gritty and coarse, clay soils feel smooth and floury, while loam's are somewhere in between. Keep in mind that not all native want to grow in loam soils, some have adapted to life in either very sandy soils or in heavy clay soils. Heavily amending soils to fit the needs of a desired plant can be economically and logistically unfeasible and likely unsuccessful in the long term. Part of the Right Plant, Right Place mantra is to work with existing soil conditions as much as possible.

#### SOIL MOISTURE AND DRAINAGE

Observation is important when it comes to assessing soil moisture and drainage. The kinds of plants that thrive in a particular spot can be a clue to soil moisture and drainage. A simple method to learn about drainage is to dig a hole roughly one foot wide by one foot deep. Fill the hole with water and watch what happens. If the water drains away within minutes to an hour, it is considered well drained. If the water drains slowly between an hour to 3 hours it is considered not well draining and if it just sits there for longer than three hours, you have poorly drained soils. None of these conditions should be cause for concern, only that your choices of plants will need to shift to those adapted to growing in the particular soil condition found in your garden. Here are four categories of sil moisture and drainage to help you understand your conditions.

**Dry soils** Moderately dry, may be loamy, and fast draining, subject to occasional short term droughts in summer **Moist, well draining soils** What most gardeners would call average soils, a well draining but moisture retentive loam **Consistently moist soils** Damper than average,typically because of shade and high levels of organic matter **Wet soils** Consistently moist soils, prone to occasional saturation or seasonal inundation.

### PLANT BEHAVIOR

Plants that are matched well to the site conditions will want to make more of themselves. This occurs either by getting bigger, spreading via suckers, root sprouts or rhizomes, or they will seed themselves into new parts of your garden. A little bit of research will go a long way to help predict how your desired native plant might behave in your garden. Ferns are good examples, some will spread via rhizomes and produce colonies and thickets, others will simply produce a clump that gets bigger with age. Too often, plants that spread are put into small spaces leading to the dismay of the gardener when the plant overwhelms its neighbors. Similarly, trees and shrubs will get larger over time, so be sure to afford them enough space to mature without causing issues to nearby structures (i.e. sheds and houses) as well as neighboring plants. Most importantly, gardens will change over time. Light conditions will change as will the competition between plants. Thankfully this is a process which unfolds on the plants time scale, allowing plenty of opportunity to observe, learn and adapt our approaches and decisions. The most rewarding gardens grow in tandem with their gardeners.