# SITE DESIGN
PLANT INSTANCE SETTINGS

Every plant object placed in a document has its own customizable options. Some of these options can be pulled directly from the Plant Definition and others are set by the plant tool when placing the plant. We will take a look at each of these settings and how they affect the plant. These settings can be changed individually per plant instance placed in a file. We will start by modifying the settings of a plant that has already been placed in this file.

As with any object, the first place to go to modify it's settings is the Object Info Palette. First, we need to select the plant . Then, in the Object Info Palette, we will see multiple options for the selected plant. We'll come back to these options later.
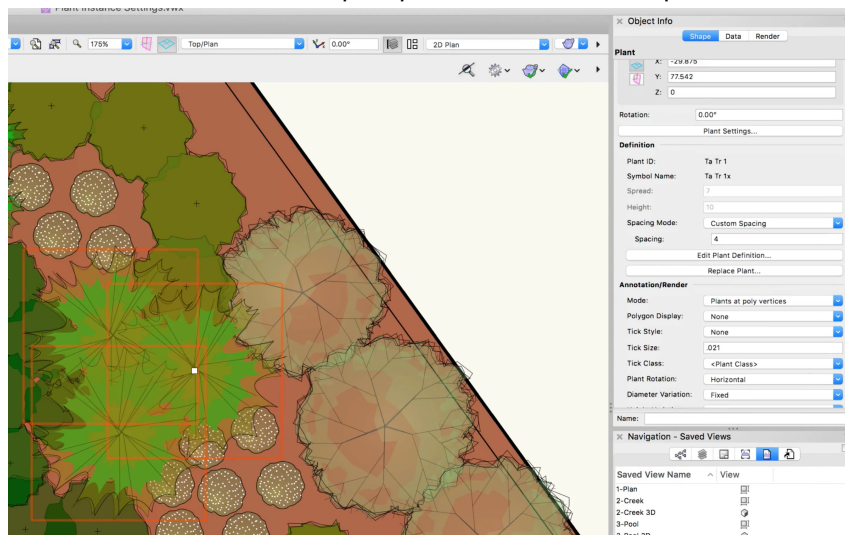

To begin, let's click the Plant Settings button to access all of the Plant Instance settings. In this dialog, we can choose a different Plant Definition for this plant instance or edit the Definition settings. However, if we just want to adjust the Placement Options for the selected plant or plants, we will just adjust the Plant Settings directly.
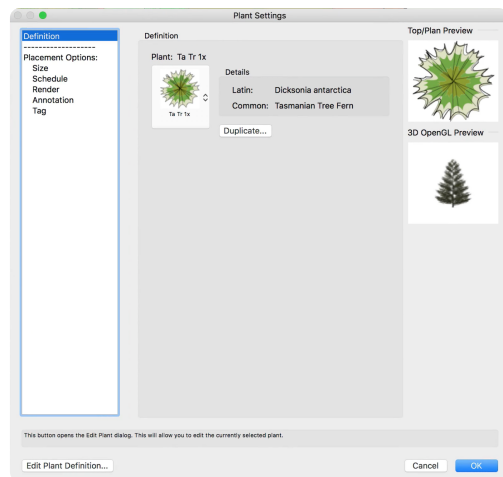

Under Placement Options, there are similar settings to the Plant Definition and a few additional categories. The key thing to remember is that any changes made under Placement Options will only affect the selected plant or plants.

In the Size pane, there are options for Spread, Height, Spacing, and Hedge Rows. The value for Spread, Height and Spacing can be set to the Use Plant Definition setting or to a Custom Value. If the Use Plant Definition is enabled, the current value set in the Plant Definition will be used.
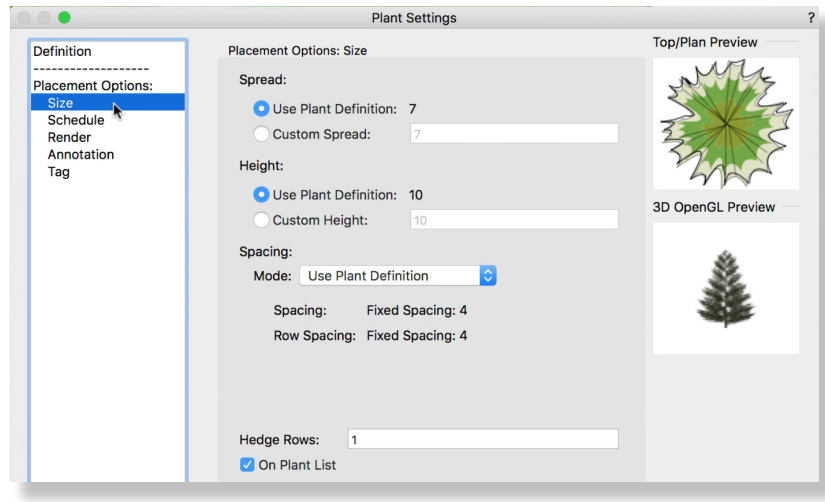

If the Plant Definition is edited and these values are changed, the plant instance will update and reflect the changes. If a Custom setting is chosen, the custom setting will override the Plant Definition. Any plants using a custom plant setting will ignore changes to the definition.
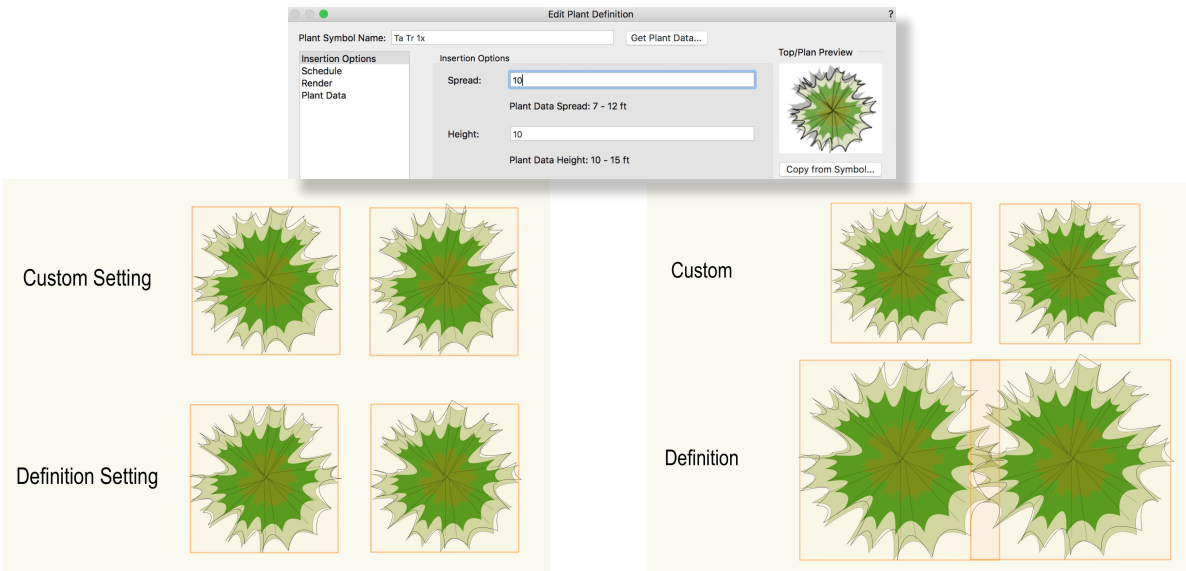

For instance, if we want to place a few instances of a single plant, but adjust the Spread and Height slightly to give a more natural appearance, we can set the Spread and Height to Custom and choose different values for each instance of the plant.

For Spacing, there are the same Plant Definition and Custom choices, as well as a Distribution by Coverage option.
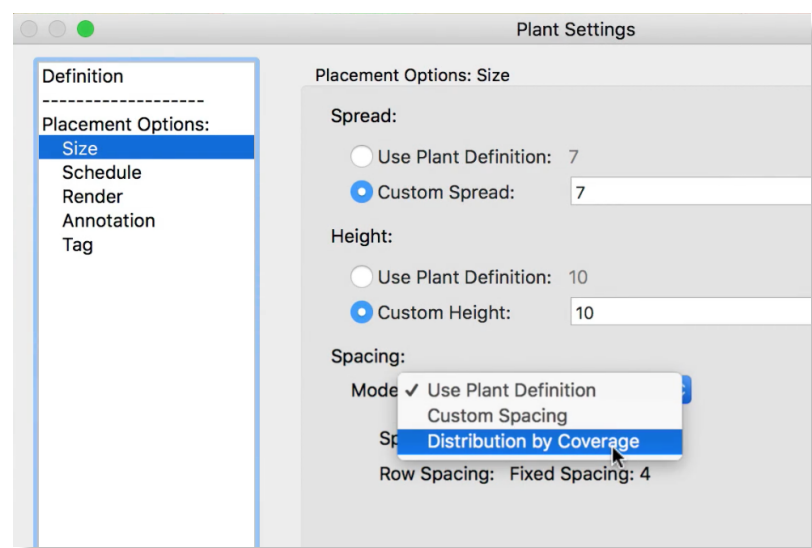

There is also an option to set the number of Hedge Rows when using the Hedge Mode of the Plant tool.
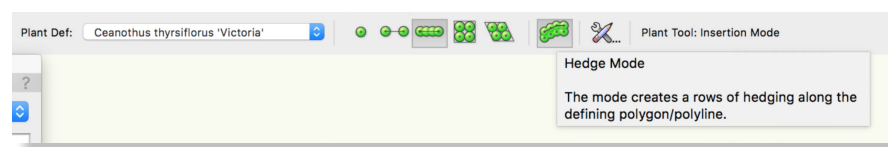

Finally under Size, we have an option to chose whether this plant will appear on our plant list.

Under Schedule, there are options to customize all of the Schedule information. We can choose to use the Plant Definition information or set custom values for the Scheduled Size, Quantity Type, Price Code, Price, and Comments. Remember, any changes made here will only affect the selected plant or plants. The Definition information will remain unchanged.
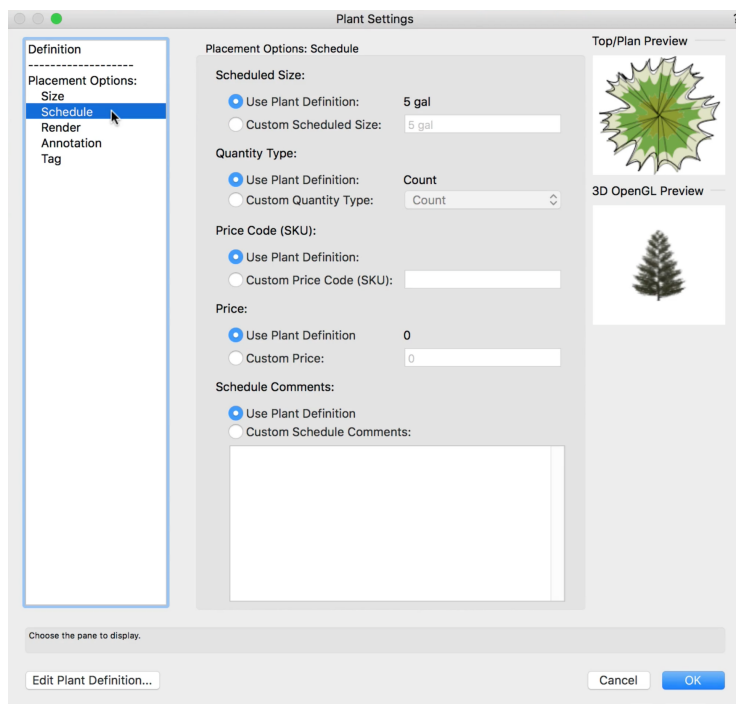

Similarly, under the Render pane, we can choose to use the values set in the Plant Definition or choose custom options for the selected plant.
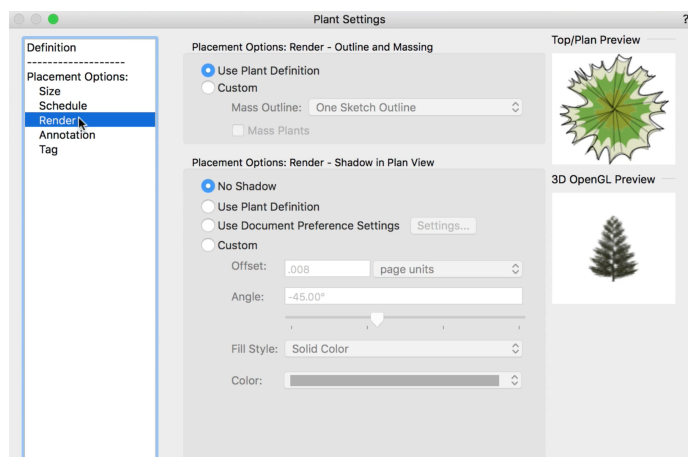

The last two categories, Annotation and Tag, are independent for every plant instance. These options can not be set in the Plant Definition.

Under Annotation there are various options. "Mode" allows for changes to the placement mode.
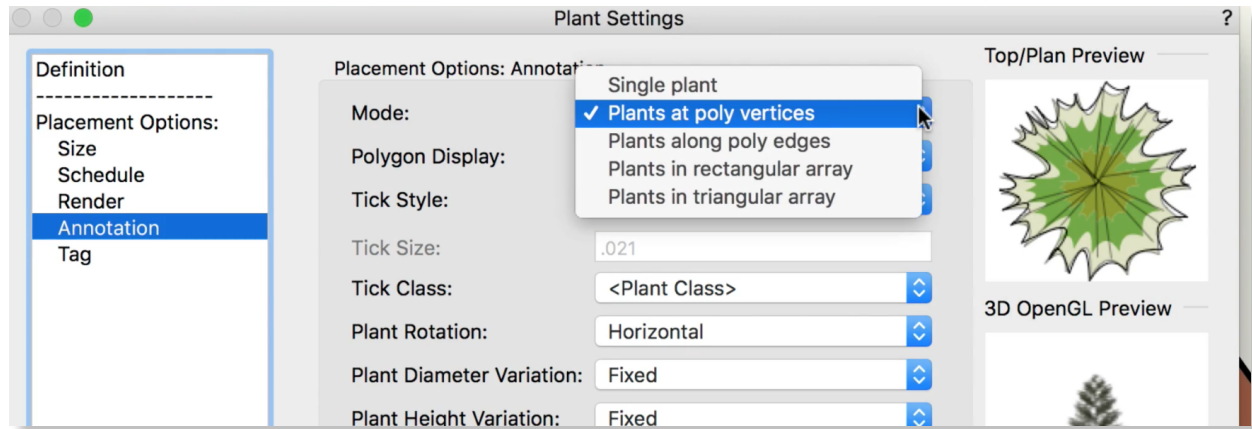

The next option is Polygon Mode. When using a placement mode that places multiple plants, a boundary, centerline, or gapped polygon can be displayed. There are both solid and dashed line options.
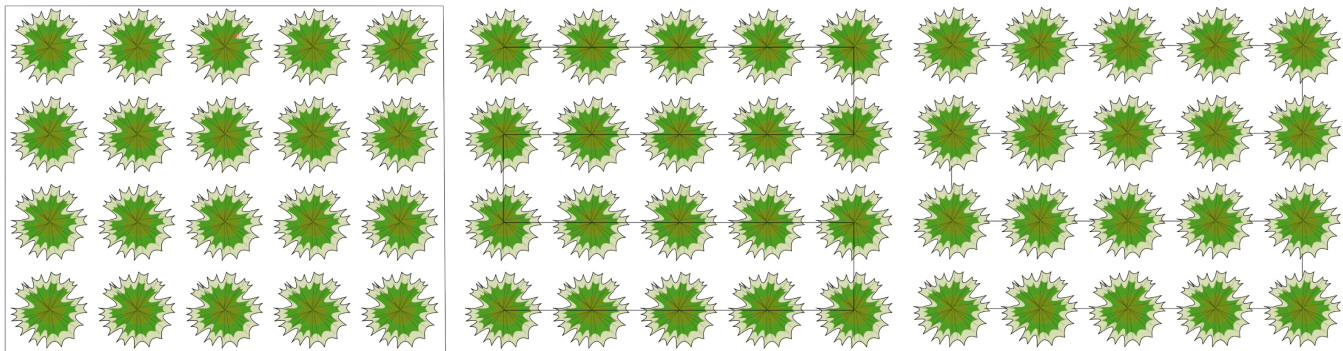

Tick Style allows for a Cross, Dot, or X Mark to be added to the plant's 2D display. This Tick Size and Class can also be modified.
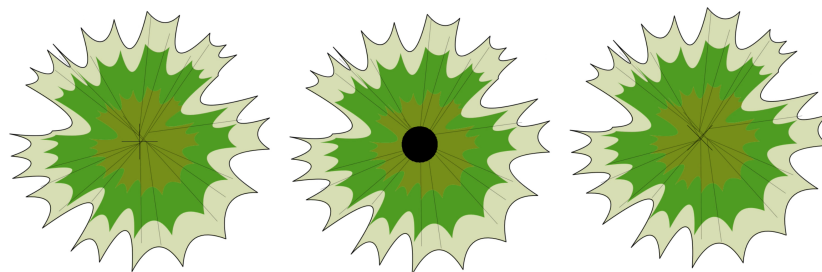
The Plant Rotation option allows the rotation of the Plant to be set to Horizontal, Along Line, or Random. Horizontal Is used when plants should stay oriented similarly throughout the plan.
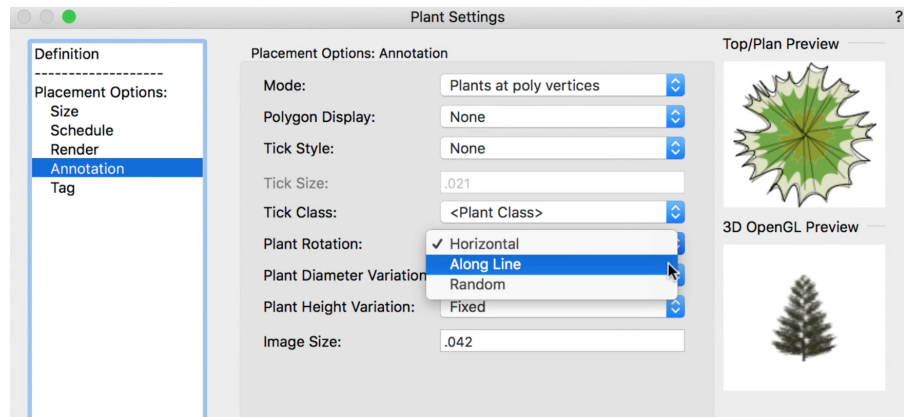
Along Line is generally used in formal hedge groupings, such as square symbols that need to align to an edge.
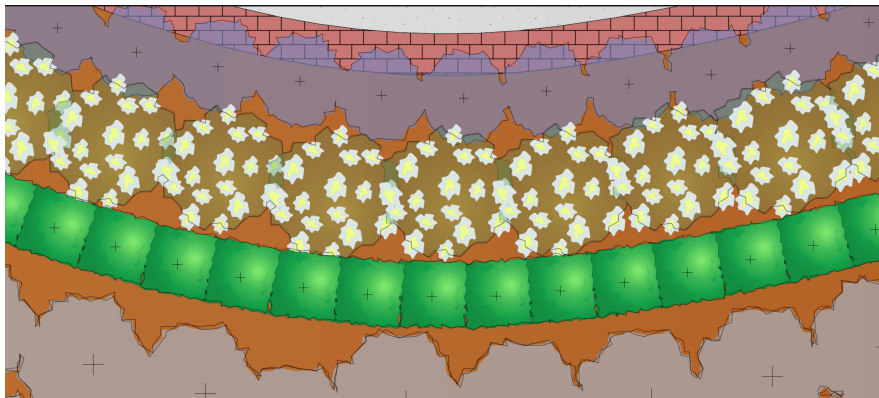
Random will give a more natural representation, producing a hand drawn, less cookie-cutter appearance.
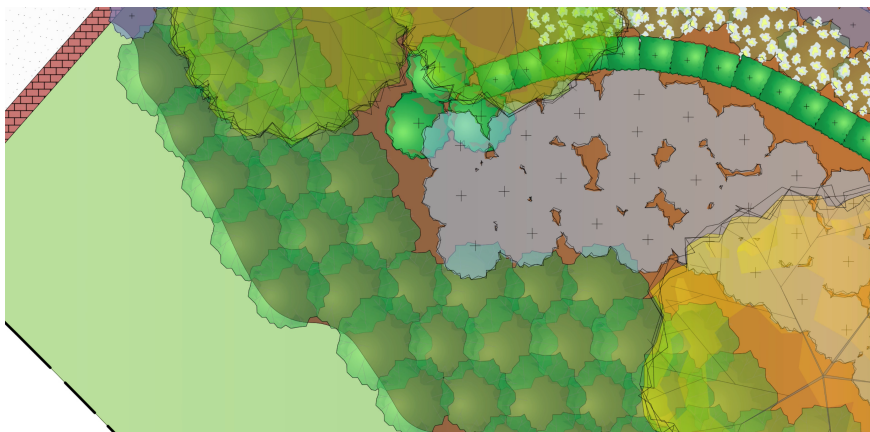
Plant Diameter and Height Variation allow you to vary the diameter and height for the selected plant. The variation is based off of the current Spread and Height of the plant. Plants can have between a 5% and 15% variation. The random options for Rotation, Diameter, and Height will give a hand drawn appearance to your planting plans. Note, these do not change the specified Spread and Height values.
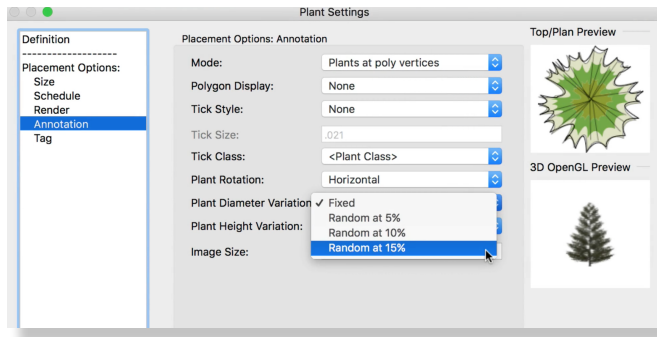

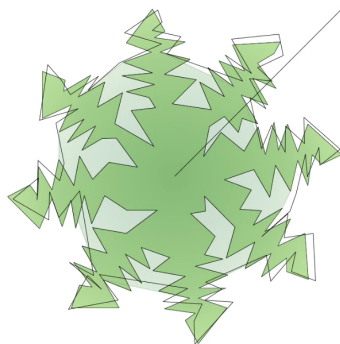Image Size, the last option under Annotation, controls the size of Plant Images in the Plant Tag. We will talk about Plant Tags in another chapter.


Matteuccia struthiopteris
(European Ostrich Fern)
Spread: 2'0"
Height: 2'0"

The final placement option is for Tag settings. We will discuss Plant Tags and their options in detail in another chapter. Here, you can adjust the Tag Display, Class, Angle, Bubble and other options.

Most of these Plant Settings can also be adjusted directly through the Object Info Palette. With a plant selected, Definition, Annotation, Render, and Tag settings can be adjusted directly. Some options, such as the Spread and Height, may be grayed out. This indicates the plant is using By Definition values for these options. To choose a custom value, click on the Plant Settings button and toggle the Custom options under Size.
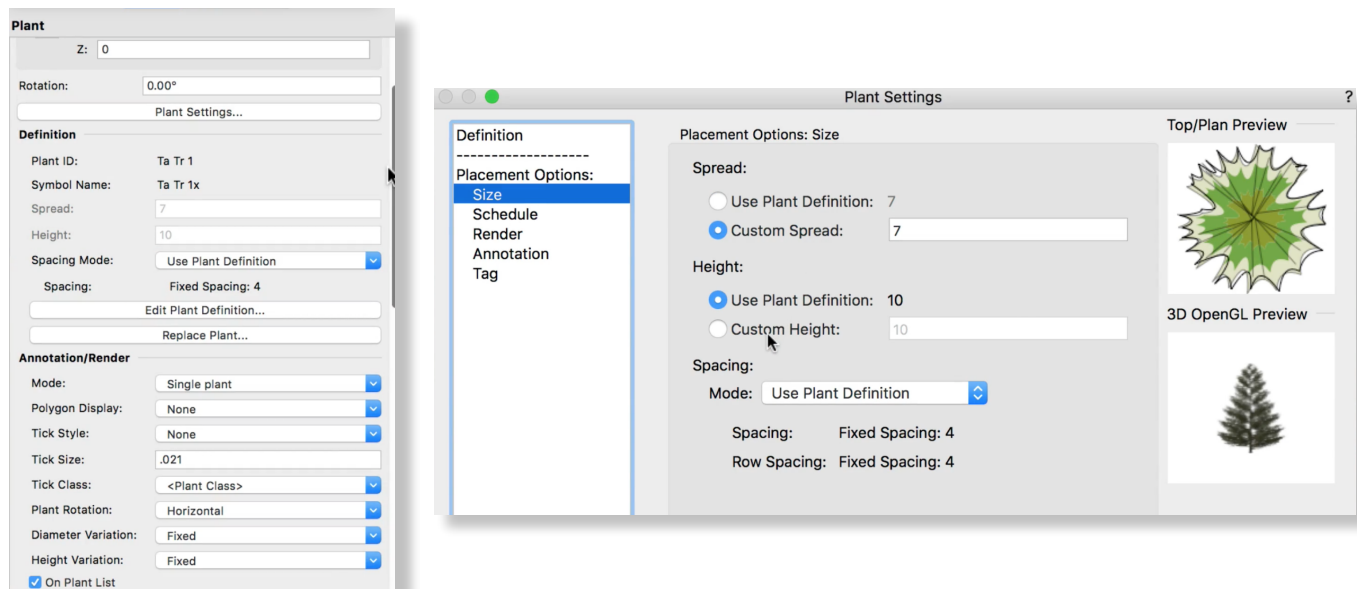

So far, we have been looking at changing the settings of a Plant that has already been placed. However, the Plant Tool can be configured to place new plants with default placement options. To adjust the settings of the Plant Tool itself, we will need to activate the tool in the Site Planning Tool Set and click on the Plant Tool Preferences button in the Tool Bar. This icon looks like a wrench and a pencil. The Wrench and Pencil icon is the default Settings or Preferences icon in Vectorworks.
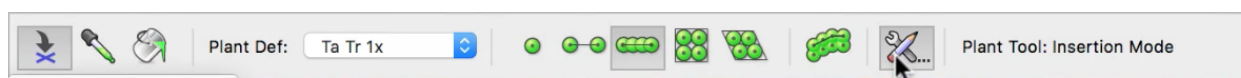

This dialog looks very familiar to the Plant Settings dialog we were looking at a moment ago. However, this dialog controls the Placement Options for the Plant Tool itself and not for a particular plant. Any changes made in the Plant Tool Preferences will affect every plant placed with the tool from this point on.
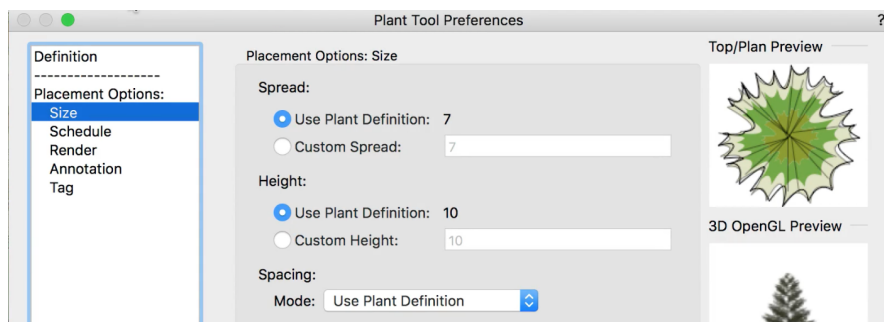
Typically, you will leave the Size and Schedule options set to use the Plant Definition for the Plant Tool Preferences. It is more common to choose specific Render, Annotation, and Tag settings in the Plant Tool Preferences. Render options can be set through the Plant Definition, but we may want a specific massing or shadow effect for a project that all plants will use, regardless of their definition render settings.
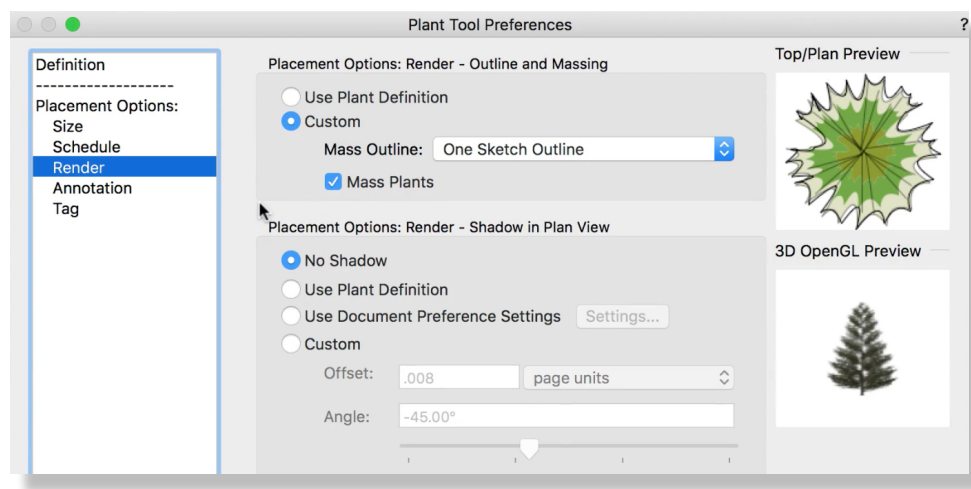
Annotation and Tag options, however, cannot be set in the Plant definition and must be set per plant instance. Setting up the annotation and tag settings in the Plant Tool Preferences will apply these settings to all plants placed in a document.
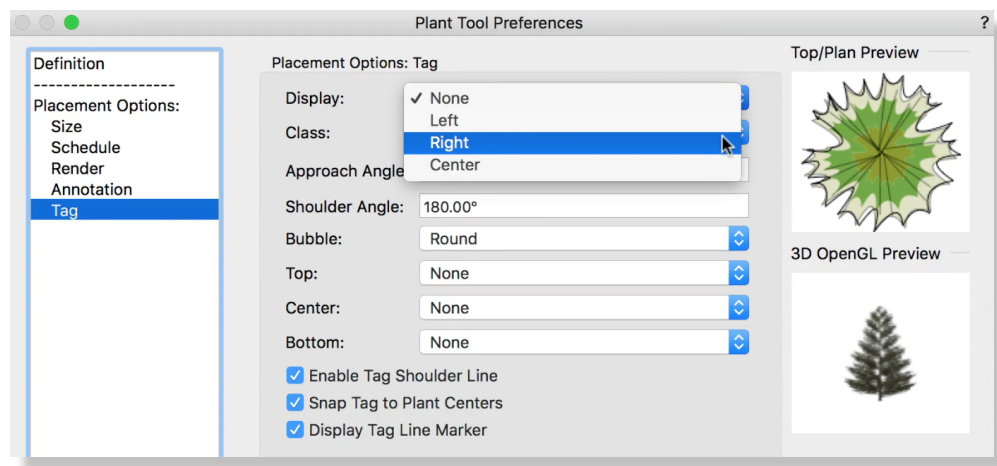
Adjusting these settings through the Plant Tool Preferences will give the plant annotations and tags a consistent look in the file without having to adjust every plant after it is placed.

All of these placement options allow each plant instance to be customized for your needs; from the size and scheduling information, to render, annotation, and tag display. This can be done individually per plant by using the Plant Settings button in the Object Info Palette or you can adjust the Plant Tool Preferences to set the defaults for every plant placed in a document.