Arnold Arboretum Summer Institute 2017: Build a Plant

Science Journaling in the Landscape

It was good and hot out, still summer weather though the calendar said September 1, 2014. In head-to-toe bug clothes, I walked up the woods, my feet quickly finding the path to the big oak. And there it was — resplendent, verdant, just as beautiful as I remembered. I had brought pencils and notebooks, a camera, and binoculars. I figured the first order of business was to get to know this big tree, top to bottom.

<u>Witness Tree</u>, Lynda Mapes

For today's journaling session, find a tree to observe. Focus on the whole tree and then its parts. Get to know this tree, top to bottom!

Sketch, label and record your observations. Include your wonderings and insights.

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Monday, August 21 What is a Plant/Plant Evolution

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Science Journaling in the Landscape

It is easy to forget the extensive root network also thriving below my tree, and how far it continues out from its trunk. Typically, tree roots extend beyond the trunk one and a half times the height of the tree. The roots aren't deep; mostly, they are in the top foot of soil. But the tree's life underground doesn't stop there.

<u>Witness Tree</u>, Lynda Mapes

For today's journaling session, return to your tree or find a new plant. Focus on the trunk and roots. Use all your senses to examine what is happening on, in, and around the trunk and roots. Sketch, label and record your observations. Include your wonderings and insights.

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Tuesday, August 22 Bottoms Up!

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Science Journaling in the Landscape

...explore sun- and shade-leaf differences. The variation of leaf shapes on a single tree,...was the key to their heat tolerance. A leaf on the south side of the tree or the top has to worry about overheating. The small sun leaves on the big oak are an adaptation to deal with leaf temperatures that get above one hundred degrees...A smaller leaf blade, with deep scalloping, allows no part of the leaf to be far from the edge, allowing for better heat transfer....Meanwhile, a leaf not in the sun can afford to have a nice wide blade. Shade leaves are broad and luxuriant so as to gather what light they can. Their area is many times that of sun leaves...

Witness Tree, Lynda Mapes

For today's journaling session, visit several trees. Focus on leaves. Use all your senses to examine the texture, shape, size, thickness and smell of a variety of leaves. Collect 3 distinct specimens.

Sketch, label and record your observations. Include your wonderings and insights.

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Wednesday, August 23 Leaf Out!

Science Journaling in the Landscape

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Thursday, August 24 Flower Power!

Arnold Arboretum Summer Institute 2017: Build a Plant

Science Journaling in the Landscape

The vegetable life does not content itself with casting from the flower or the tree a single seed, but it fills the air and earth with a prodigality of seeds, that, if thousands perish, thousands may plant themselves, that hundreds may come up, that tens may live to maturity; that, at least one may replace the parent.

Ralph Waldo Emerson

For today's journaling session, roam the landscape searching for flowers. Choose one to examine, carefully dissecting the floral parts. Search also for forming fruit within the same plant, and examine the relationship between flower and fruit and seed.

Sketch, label and record your observations. Include your wonderings and insights.

Along the way, photograph up to 3 distinct flower forms.

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