

WEEKLY UPDATE – SEPTEMBER 24 – OCTOBER 1, 2017

“T’is autumn in our northern land,
The sun walks queen no more;
Her scepter drops from out her hand;
Her strength is spent, her passion o’er.”
Mrs. Ellen (Palmer) Allerton (1835-1893), “September”

With the official passage into autumn, the garden is gently transitioning into its fall colour, texture and fragrance. The effects are still subtle, but splendid nonetheless. Seen in the past few days:

- berries on the mountain ashes, hips on the roses, fruits on the hawthorns
- the paper lanterns on the *Koelreuteria* trees
- pink and white miniature cyclamen at the base of trees
- drifts of autumn crocus in the Mediterranean Garden and the Autumn Stroll
- a heron at the top of the cedar of Lebanon on the shore of Heron Lake
- a huge wasp nest in the upper branches of the *Pinus wallichiana* in the Sino-Himalayan Garden near the Taiwanese coffin tree
- lots of fall clean up in the Blue Border and up the path towards the Waterfall
- look way, way up to glimpse cones on the giant sequoiadendron closest to the path leading out of the Mediterranean Garden
- the watchful doll’s eyes (*actaea pachypoda*) in the ENA

Guide Goings On

1. Thursday, September 28 – AV equipment training session
10:30 – Floral Hall
2. FYI – October’s Gardener’s Walk has been cancelled
3. Thursday, October 12 – Guide Education/Business Meeting
The speaker is Lori Snyder and her topic is
“Wild, Native, Edible and Medicinal Plants”.
10:00am – Floral Hall

Garden Goings On

1. ZimCarvings with Patrick Sephani and visiting artist Peter Kanaji
Until September 30 in the Discovery Room and in the Garden
2. Works by Anna Milton
Until September 27 in the Library
3. Dried Flower Arrangers’ Sale
Friday, September 29; Saturday, September 30; Sunday, October 1
1:00pm – 4:00pm – HSBC Arrival Hall in the Visitor Center
4. Soil, Manure and Compost Sale
Saturday, September 30 – 10:00-3:00pm
West End of the Vandusen Parking Lot of West 37th Ave.

5. Works by Vicky Earle
Sunday, October 1 – December 30
At the Bloedel Conservatory and in the Yosef Wosk Library
Opening Reception in the Library – October 1 – 2:00pm-4:00pm

Garden Clippings

1. In the “Weekly Update” archives for 2016
September 24-October 1 – Indian Summer
2. If you watched and enjoyed Knowledge Network’s presentation of Monty Don’s “Around the World in 80 Gardens’, then stayed tuned for a reprise of “Monty Don’s Italian Gardens’ which started last week featuring gardens in and around Rome and continues this week with gardens in the Tuscan countryside and Florence.
3. Check out www.treelib.ca for a ‘high quality collection of tree photographs for educators, students and lay-persons’.

Tree Highlight – Red Alder – *Alnus rubra*

“For the bark, dulled argent, roundly wrapped
And pigeon-collared.

For the splitter-splatter, guttering
Rain-flirt leaves.

For the snub and clot of the first green cones,
Smelted emerald, chlorophyll.

For the scut and scat of cones in winter,
So rattle-skinned, so fossil-brittle.

For alder wood, flame-red when torn
Branch from branch.

But mostly for the swinging locks
Of yellow catkins.

Plant it, plant it,
Streel-head in the rain.”

Seamus Heaney (1939-2013), “Planting the Alder”

Like the willow, the alder has an affinity for water and thrives nears lakes, ponds, floodplains and streams. Alder wood in water resists decay; indeed, it becomes almost as hard as concrete when submerged and was used extensively for underwater foundations in Venice and Amsterdam.

A member of the Betulaceae (birch) family, *Alnus rubra* is the largest alder species in North America and occurs all along the coast of BC. According to David Tracey's *Vancouver Tree Book*, the second largest red alder tree in Canada grows near the concession stand at Third Beach in Stanley Park.

The oval-shaped leaves of red alder stay green until they drop off; their distinguishing characteristic is that they tend to curl under. Alders are monoecious; the male flowers are long, drooping red catkins that eventually turn yellow while the female flowers ripen into little brown, woody cones. The seed is a narrow winged nutlet. The stately red alder beside Livingstone Lake is currently exhibiting green catkins.

The plate-like patterned bark is initially white but turns grey with age; it is often colonized by lichen and moss. When the underbark is exposed to air or damaged it tends to turn orangey-red, thus the name. First Nations people used the bark for dyeing basket material, wool and wood and also to treat poison oak rashes, insect bites and skin irritations.

The inner bark was also used as food source by both people and animals such as deer, elk and beavers. Finches and deer mice eat the seeds.

Red alder is a pioneer species and quickly covers burned areas and clearcuts. Not only is it a prolific seed producer, but it is a nitrogen- fixer, i.e. it pumps nitrogen back into the soil by means of nodules on the roots which house an organism that converts nitrogen in the soil into a form easily absorbed by plants. Nitrogen-rich leaves provide nutritious compost for more alders or other plants and trees.

The wood of red alder is used for furniture and fine cabinetry, flooring and firewood. The body of the famous Fender Stratocaster guitar is shaped from red alder.

As one of the seven Celtic sacred trees along with the oak, hawthorn and ash, alder figures prominently in Celtic mythology and folklore as well as fairy lore. It is the fourth consonant of the Ogham alphabet

VanDusen Garden has two red alders, the big one beside the Lake (although it seems to be in a bit a decline and has recently had a large branch removed) and in bed 137F in the Canadian Medicinal Garden. It was the garden's Tree of the Month in May, 2014.

The Invention of Nature: Alexander Von Humboldt's New World – Andrea Wulf

Although it hardly qualifies as beach reading, Wulf's biography of Alexander von Humboldt, Prussian aristocrat, polymath, intrepid and daring explorer, prolific writer, pioneer of natural science, and prescient early environmentalist of the nineteenth century, kept me enthralled and tops my list of summer reading.

Humboldt was the most famous scientist of his day; he profoundly influenced the most well-known contemporary writers, thinkers, scientists, politicians and naturalists and many who followed. But even though we may be familiar with the Humboldt current, the Humboldt penguin, Humboldt Redwood State Park in California, as well as numerous monuments, mountain ranges, glaciers, lakes and rivers and waterfalls, cities and towns, flora and fauna and more all around the world that bear his name (indeed, his name lingers everywhere!), we know very little about Alexander von Humboldt. Outside of academia, he is largely

forgotten in the English speaking world and he has largely faded from the collective memory. In *The Invention of Nature*, winner of the Royal Society Science Book Prize, 2016, along with many other awards and honours, Wulf seeks to reintroduce this remarkable man to a contemporary audience and reveal the multitude of ways by which his ideas have influenced the way we understand nature today.

Best of all, this is not a dry collection of events and facts. Humboldt's colourful and adventurous life reads like a rollicking *Boys' Own Adventure* series, and Wulf's elegant prose style brings the man and his experiences to life.

In Part I, "Departure: Emerging Ideas," Wulf examines Humboldt's early life, upbringing and education along with the experiences and relationships that lead him to formulate his worldview, i.e. that nature is a living whole, a single, great living organism where everything is connected. Humboldt was born in the Age of Enlightenment, whose watchword was progress; it was a period of great excitement and discovery, but very little thought was given to the effects of progress on nature and man's relationship with the natural world. His friendship with Goethe, himself a passionate scientist, equipped him with 'new organs' through which to see and understand the natural world. Goethe said of him, 'He was a fountain with many spouts from which streams flow incessantly and infinitely...' Humboldt was also profoundly influenced by the philosophical teachings of Immanuel Kant with his more holistic view of the construct of knowledge and the idea that sensory perception was as critical as reason in understanding the world.

Part II, "Arrival: Collecting Ideas" sees Humboldt travelling with his botanist companion, Aimé Bonpland, to Latin America on a momentous journey that lasted five years; during this time, he explored and researched, collected data and performed experiments, measured, examined and questioned, all the while enduring horrible privations and pushing his body to the limit. Landing in modern day Venezuela, he travelled to Lake Valencia where he saw and recorded the effects of human-induced climate change caused by deforestation and the resultant soil erosion. He mapped the Orinoco's union with a tributary of the Amazon. His experiments with electric eels buried in mud killed many of the wild horses sent in to disturb them and nearly killed both himself and Bonpland when they pulled them out to perform experiments with animal electricity, a subject which had fascinated both Goethe and Humboldt for years. On his nine-month, 1,300 mile trek along the northern Andes he discovered the magnetic equator. On this expedition, seemingly oblivious to the dangers, he climbed to the summit of Chimborazo, risking life and limb, a feat which Wulf replicated. It was also on this journey that Humboldt created his new vision of nature, his 'Naturegemalde', a visual representation depicting Chimborazo in a cross-section to show that everything in nature, flora and fauna, climate zones, topography etc. reveals the 'Earth as one great living organism where everything was connected', in short, the web of life.

On his way back to Europe, Humboldt and Bonpland made many stops in the United States, where they were celebrated and feted. With great admiration for the American ideals of liberty and fraternity and sharing similar beliefs and insights, he and Thomas Jefferson became lifelong friends although he deplored the fact that Jefferson was a slave owner.

In Part III "Return: Sorting Ideas", Humboldt's triumphant return to Europe brought him celebrity status. Dividing his time between Paris, which he found more stimulating, and Berlin, Humboldt began to write and publish extensively about his travels in the multi-volume *Voyage to the Equinoctial Regions of the New Continent* and was in demand as a

speaker. At this point, he met Simon Bolivar and, in support of Bolivar's revolutionary ideas, began to explore the politics of Latin America that led to his belief that colonialism significantly contributed to the devastation of nature.

Although he was accomplishing a great deal at this time and had many responsibilities, Humboldt was restless and longing to undertake another expedition. Denied the opportunity to explore the Himalayas, he eventually set out on a 10,000-mile journey across Russia, surviving an anthrax outbreak along the way. The description of this undertaking is the core of Part IV, "Influence: Spreading Ideas". When he got home, he wrote *Cosmos*, an immediate best seller which clearly spelled out his vision and worldview. This part also examines the influence of Humboldt on Charles Darwin, who took seven volumes of *Personal Narrative* (a subsection of *Voyage*) with him on his own voyage on the *Beagle* and on the poet and philosopher, Henry David Thoreau (whose birthday bicentennial we are celebrating this year).

Part V of *The Invention of Nature*, "New Worlds: Crystallizing Ideas" looks at the environmentalists of the twentieth century including John Muir, Rachel Carson, and many others although more detailed accounts of Humboldt's adventures would have been welcome.

Much of Humboldt's writing is available in English translations, but Wulf's biography provides an excellent starting point for getting a sense of this extraordinary individual whose interdisciplinary and comparative approaches to science and nature made science accessible and popular in his own day. His curiosity and sense of wonder complement his love of measurement and analysis. His writing has inspired so many who have followed him and has firmly established him as the founding father of environmentalists and nature writers. It is time that we became more familiar with Alexander von Humboldt and learned more about the man behind everything named after him.

The library has a copy of *The Invention of Nature* and it is available in paperback in bookstores.

Please send comments, questions, corrections etc. to pkbuchanan@shaw.ca

Fall is upon us. Have a great week of guiding.

"The dark green summer with its massive hues,
Fades into autumn's tincture manifold;
A gorgeous garniture of fire and gold
The high slope of the ferny hill indues " "
Hartley Coleridge (1796-1849), "September