

The AWU – Center for Environmental Research

Austin Water Utility – The University of Texas – Texas A&M University A Partnership for Urban Ecology and Sustainability: Community, Education, Research located at the Hornsby Bend Biosolids Management Plant 2210 South FM 973, Austin, Texas 78725 Website: <u>www.austintexas.gov/cer</u> Facebook: <u>www.facebook.com/austinwatercer</u>



AWU-CER Lunchtime Lectures 2016

By Dr. Kevin M. Anderson, AW Center for Environmental Research

The Unity of Nature: The Creation, Discovery, and End of Nature

In 1798, Alexander Von Humboldt (1769-1859) was appointed by the King of Spain to make the first extensive scientific exploration of Spanish America. "I shall collect plants and fossils and make astronomic observations. But that's not the main purpose of my expedition – I shall try to find out how the forces of nature interact upon one another and how the geographic environment influences plant and animal life. In other words, I must find out about the unity of nature." Equipped with the most sophisticated scientific field instruments of his time, Von Humboldt traveled through the New World mapping the biogeography of the Americas from 1799-1804. At the end of his journey, he had a new vision of nature – of isotherms, ecosystems, food webs, watersheds, climate change, and complex interconnectivity – and he had invented the concept of nature that we have today.

Before returning to Europe, at the invitation of President Thomas Jefferson, he stopped in the new United States and met with Jefferson and others. Through that meeting and his subsequent writings, he opened American culture to his vision of nature. On his return to the Old World, he became the most celebrated and influential scientist of his age. No one had a greater impact on the modern concept of the earth as a "natural whole" - a biogeochemical system open to rational explanation yet charged with imaginative potential and threatened by human mismanagement. This idea of nature - as an ordered unity, as a globally complex system of interconnections, as a cosmos open to imagination and wonder, as a subject for exacting scientific study, and as an object of human mismanagement – is now a familiar concept, however, in America, Von Humboldt is largely forgotten.

The 2016 CER Lunchtime Lectures will explore the concept of nature and Von Humboldt's legacy. We will begin by examining the creation of our Western ideas of and the study of nature which laid the foundations for Von Humboldt's ideas. From there, we will trace the influence of Von Humboldt on science, literature, and environmental management. In Europe, his influence ranged from shaping the ideas of nature for Goethe and the Romantic poets to inspiring scientists like Darwin, Agassiz, Haeckel, and others. Moreover, no other European had as great an impact on 19th century American intellectual culture from the sciences (Agassiz, Gray, Bache, Maury) to literature (Emerson, Thoreau, Whitman, Muir) and painting (Church, Catlin). In 1869, the centennial of his birth was celebrated across the globe, from Moscow to Mexico City and, in the United States, most cities hosted celebrations, with 10,000 people joining President Grant in Pittsburgh while 15,000 attended the festivities in New York City. One hundred years later, Von Humboldt was hardly remembered, but through our beliefs about nature his legacy persists. The year will end by seeing how his legacy emerges in contemporary environmentalism, environmental science, and the idea of the Anthropocene.

Each talk begins AT NOON

Locations and Day of the Month -

Every 3rd Tuesday - Austin Water Center for Environmental Research (CER) at Hornsby Bend Every 3rd Wednesday - One Texas Center (OTC) at 505 Barton Springs Road and South First Street, Room 325

Free and Open to the Public – bring a lunch and learn

Time: Noon to 1pm Locations and Day of the Month –

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The Creation of Nature [January – March]

We begin the year by looking at the two dominant ideas of American nature: wilderness and pastoral nature. Wilderness as pure nature and spiritual solace has a unique hold on the American mind, but it lives in tension with the American agrarian ideal of family farm and ranch landscapes and culture. We will explore the origins, implications, and contradictions of these two ideas of nature, and then we will turn to the origins of life sciences and the study of nature beginning with the ancient Greeks and moving to the Enlightenment.

January 19 CER – First Nature: The Pristine Myth and Wilderness January 20 OTC – First Nature: The Pristine Myth and Wilderness

February 16 CER – Second Nature: Pastoral Landscapes and the Cultivation of Nature February 17 OTC – Second Nature: Pastoral Landscapes and the Cultivation of Nature

March 15 CER – The Study of Nature: Natural History and the Creation of Nature March 16 OTC – The Study of Nature: Natural History and the Creation of Nature

The Discovery of Nature [April - September]

Over these six lectures, we will see how Alexander Von Humboldt transformed the practice of natural history and collecting nature into the science of nature. We will look at how he balanced imagination with scientific exactitude, thereby inspiring both poets and scientists to study nature in the 19th century. In particular, his influence on Darwin was profound both in setting Darwin's life course and in fostering his idea of evolution. As the 19th century ended, new sciences of nature emerged and Von Humboldt's ideas to shape in 20th century science and culture.

April 19 CER – The Nature Collectors: New Lands, New Nature, and Ecological Imperialism April 20 OTC – The Nature Collectors: New Lands, New Nature, and Ecological Imperialism

May 17 CER – The Scientist of Nature: Alexander Von Humboldt and the Physical Description of the Earth May 18 OTC – The Scientist of Nature: Alexander Von Humboldt and the Physical Description of the Earth

June 15 OTC – The Invention of Modern Nature: The Earth as a "Natural Whole" June 21 CER – The Invention of Modern Nature: The Earth as a "Natural Whole" (NOTE THE REVERSED DAYS)

July 19 CER – The Romance of Nature: Science, Imagination, and the Poets of Nature July 20 OTC – The Romance of Nature: Science, Imagination, and the Poets of Nature

August 16 CER – The Evolution of Nature: Von Humboldt, Darwin, and the Systematic Universe August 17 OTC – The Evolution of Nature: Von Humboldt, Darwin, and the Systematic Universe

September 20 CER – The Economy of Nature: Ecology, Earth Science, and Biotic Navigation September 21 OTC – The Economy of Nature: Ecology, Earth Science, and Biotic Navigation

The End of Nature [October – December]

Today Von Humboldt is largely forgotten in America, but his legacy persists in environmentalism, science, and natural resource management. The final three lectures will explore how his ideas persist in contemporary culture and how relevant his writings and ideas are to contemporary debates about climate change and human impacts on the Earth.

October 18 CER – The Great Disruptors: Environmentalism and the Idea of American Nature October 19 OTC – The Great Disruptors: Environmentalism and the Idea of American Nature

November 15 CER – The Earth Managers: Balance, Resilience, and Environmental Science November 16 OTC – The Earth Managers: Balance, Resilience, and Environmental Science

December 20 CER – The End of Nature: Permanence, Change, and the Anthropocene December 21 OTC – The End of Nature: Permanence, Change, and the Anthropocene