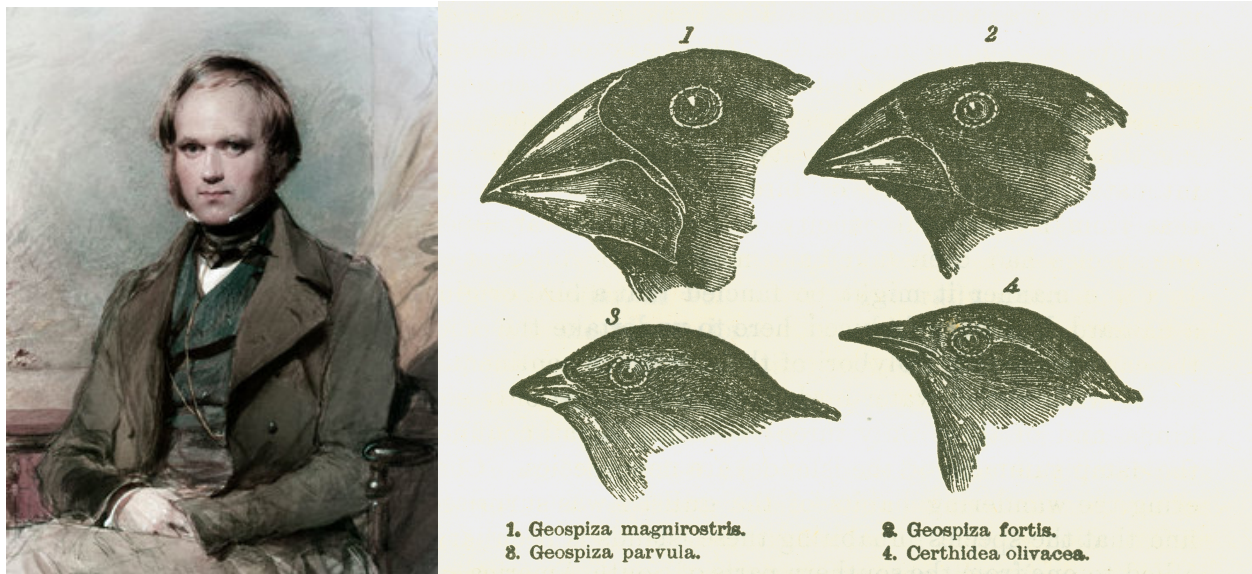


## History beyond the Classroom: Galápagos

Harvard University  
Department of the History of Science Graduate Course - Summer 2017

Instructors: Professor Janet Browne & Dr. Laura Martin



We are taking the title of ‘History beyond the Classroom’ seriously in several ways.

1. New kinds of resources. We have an unparalleled opportunity to experience for ourselves something of what Darwin and Humboldt encountered on their travels. We will of course arrive at our field sites by modern means of transport, and the natural history, civic landscapes, and modes of encounter (guided walks and so forth) will be different. We will have to use our imaginations. But this is what we do as historians when we read texts or engage with historical objects. We will attempt, as a group, to put this creative engagement with new kinds of resources to work.
2. Re-creation. There is a long tradition of historians, literary scholars, biographers, etc, following in the footsteps of particular people (eg. Richard Holmes, *Footsteps: Adventures of a Romantic Biographer*, about Robert Louis Stevenson). We can attempt not only to see with the eyes of our historical person but also to address that difficult problem critically. Maybe more possible, is to recreate the bodily sensations of walking, heat, tiredness, excitement, the surprise of fresh vistas, the evening review of achievements, the documentation, and so forth.
3. Scientific understanding. We have an opportunity to engage with the biology and geology of our sites. The ecologies of mountains and islands have been key factors in developing

awareness of evolution and biogeography. We will see how difficult it was for Darwin to come to any conclusions about the natural history of the Galapagos and how skilled Humboldt needed to be in order to articulate his zones of botanical habitation. We will think about the features of insular species, mountain species, divergence, adaptation, and ecological niches. We have a chance to think about volcanoes and the creation of land.

4. Conservation. The islands have been a major conservation zone from 1959, and the marine park from 1986. We will think about indigenous species, introduced species (rats, goats, humans), extinction (tortoises), planned breeding and re-introduction programs, and the complex management and infrastructures that allow tourists to encounter the Galapagos as seemingly pristine lands. We will explore the history and politics of conserving landscapes as “natural laboratories” and areas of scientific importance.
5. Broader perspectives. We aim to help you develop a deeper understanding of the role of fieldwork in Darwin’s and Humboldt’s scientific achievements; to become better teachers by thinking about the changing historiography relating to these sites and the pedagogical value of field trips; to learn something of the modern biological work that takes place in the Galapagos; and to consider conservation management and practical issues on the ground. We also aim to make material the advantages of thinking globally about science and the problematic (and changing) role of European dominance—both then and now.

## Readings

### Seminar 1: Overview

Edward Larson, *Evolution's Workshop: God and Science on the Galápagos Islands* (Basic Books, 2002)

Herman Melville, “The Encantadas” (1854) (<http://www.melville.org/encant.htm>)

Charles Darwin, *Voyage of the Beagle* (Penguin, 1989)

Alistair Sponsel, “An Amphibious Being: How Maritime Surveying Reshaped Darwin’s Approach to Natural History,” *Isis* 107 (2016): 252-281.

Janet Browne, *Darwin’s Origin of Species: A Biography* (Atlantic Books, 2006)

### Seminar 2: Humboldt and Geology/Ecology of Ecuador

Susan Faye Cannon, “Humboldtian Science,” in *Science in Culture: The Early Victorian Period* (Dawson, 1978), 73-103.

Alexander von Humboldt, *Essai sur la Géographie des Plantes* (University of Chicago Press, 2009).

Aaron Sachs, "The Chain of Connection," "Personal Narrative of a Journey," and "Excursion: Watersheds," in *The Humboldt Current: Nineteenth-Century Exploration and the Roots of American Environmentalism* (Viking, 2006), 8-72, 177-184.

### **Seminar 3: Darwin and the Galapagos**

Charles Lyell, *Principles of Geology*, Volume 2, esp. Ch. 2-5, Ch. 11.

Janet Browne, "Islands," in *Charles Darwin: Voyaging* (Princeton University Press, 1995), 296-320.

K. Thalia Grant and Gregory Estes, *Darwin in Galapagos: Footsteps to a New World* (Princeton University Press, 2009), 134-137, 148-151, 174-213.

### **Seminar 4: Natural Selection, History of Ecology**

Malcolm Nicolson, "Alexander von Humboldt, Humboldtian Science, and the Origins of the Study of Vegetation," *History of Science* 25 (1987): 167-194.

Peter Grant and Rosemary Grant, "Watching Speciation in Action," *Science* 365 (2017): 910-911.

"Beak of the Finch" Video: <http://www.hhmi.org/biointeractive/origin-species-beak-finch>

### **Seminar 5: The Historical Legacy of the Galapagos**

Robert J. Richards, "Darwin's Romantic Biology," in *The Romantic Conception of Life: Science and Philosophy in the Age of Goethe* (University of Chicago Press, 2002), 514-554.

Charles Darwin, "Voyage of the Beagle: from Dec. 27, 1831 to Oct. 2, 1836," in *Autobiography* (edited by Nora Barlow, 1958), available at <http://darwin-online.org.uk/>

Frank Sulloway, "Darwin and his Finches: the Evolution of a Legend," *Journal of the History of Biology* 15 (1982): 1-53.

### **Seminar 6: Marine Parks, Protected Areas, and Ecotourism**

Paolo Bocci, "Tangles of Care: Killing Goats to Save Tortoises on the Galápagos Islands," forthcoming, *Cultural Anthropology*

Elizabeth Hennesey, “The Molecular Turn in Conservation: Genetics, Pristine Nature, and the Rediscovery of an Extinct Species of Galapagos Giant Tortoise,” *Annals of the Association of American Geographers* 105 (2015): 87-104.

Laura J. Martin, Bernd Blossey, Erle C. Ellis, "Mapping Where Ecologists Work: Biases in the Global Distribution of Terrestrial Ecological Observations," *Frontiers in Ecology and the Environment* 10 (2012): 195-201.

Wendy Wolford, Flora Lu, and Gabriela Valdivia, “Environmental Crisis and the Production of Alternatives: Conservation Practices in the Galapagos Islands,” in *Science and Conservation in the Galapagos Islands* (Springer, 2013), 87-104.

### Itinerary for Quito and the Galápagos Islands

Day 1	Arrive in Quito
Day 2	City tour of Quito
Day 3	Cotopaxi National Park
Day 4	Jardin Botanico, Teleferico, Museo Ethnohistorico de Artesanias del Ecuador Mindalae
Day 5	Arrive in Baltra, transfer to the Galaven Santa Cruz: Black Turtle Cove
Day 6	Genovese: El Barranco Genovese: Darwin Bay
Day 7	Santiago: Sullivan Bay Rábida
Day 8	Santa Cruz: Charles Darwin Research Station
Day 9	Depart Quito

