

Alternative Fuels Data Center. U.S. Department of Energy. Access: <http://www.afdc.energy.gov/>.

The Alternative Fuels Data Center (AFDC) is a repository for alternative fuel performance data for policymakers, government agencies, businesses, researchers, and the general public. It aims to reduce transportation petroleum use by serving as an information hub. It was initially created in 1991 by the Department of Energy as a byproduct of the Alternative Motor Fuels Act of 1988 and the Clean Air Act Amendments of 1990.

The playful fuel pump graphics on the homepage lead to information about major alternative fuel types: the basics, benefits and considerations of vehicles, locations of fuel stations, vehicle emissions and safety, laws and incentives, and fuel price trend reports. The “Fuels & Vehicles” section provides a vehicle buyer’s guide that highlights specific vehicle models and makes, energy impact, MSRP costs, and other information.

“Conserve Fuel” offers strategies to conserve fuel, such as idle reduction, parts and equipment (devices to save fuel), driving behavior, fleet resizing, and transportation system efficiency. An interactive map pinpoints nearly 22,000 alternative fueling stations across the United States.

Federal and state laws and incentives, as well as local examples, are covered in “Laws & Incentives,” which also features a succinct table of clean transportation regulations and funding opportunities that link to related resources. More than 125 maps and charts about transportation data and trends are incorporated in “Maps & Data.”

The “Case Studies” section deserves special recognition. It highlights nearly 250 exciting case studies and success stories about alternative transportation technology and alternative fuels.

Joni R. Roberts is associate university librarian for public services and collection development at Willamette University, email: jroberts@willamette.edu, and Carol A. Drost is associate university librarian for technical services at Willamette University, email: cdrost@willamette.edu

These case studies can be browsed by alternative fuel or by 12 applications (e.g., long-haul trucking and school transportation) and consist of videos, news articles, and documents that date back to 2009. As an example, a 2016 video by Motorweek.org highlights how the Lancaster Company of Pennsylvania converts trash to energy which powers vehicles plus 45,000 homes and businesses.

This site also provides a generous collection of publications (reports, brochures, and fact sheets), which are searchable. Also worth mentioning is the powerful collection of external tools (e.g., vehicle cost calculator, coalition locator, and GREET Fleet Footprint Calculator). The AFDC website will be a valuable resource to anyone researching alternative transportation fuels.—*John Repplinger, Willamette University, jrepplin@willamette.edu*

Kew Science. Access: <http://www.kew.org/science-conservation>.

The Royal Botanic Gardens Kew, a UNESCO World Heritage Site located in London, has been heavily involved in the study of plants since its establishment in 1759. The branch of Kew currently dedicated to advancing and disseminating scientific research is Kew Science, which maintains a robust web portal to freely accessible information resources related to Kew’s evolving science and conservation initiatives, specimen collections, and global plant and fungal knowledge.

Available resources span an array of complexity, but bring together significant information about plant and fungi taxonomy, genetics, species diversity, conservation, ethnobotany, and Kew’s globally renowned collections.

The site’s design is visually oriented, drawing users to image-heavy content via a slider banner, recent blog and news links, and select resources paired with eye-catching photographs. The navigation menu, however, is understated and easily overlooked, potentially hindering effective resource discovery. Also lacking is a sitemap, and the only site search available is a Google

Custom Search within the full “kew.org” domain. Kew provides no way to limit search content to Kew Science more specifically.

Useful content that may be most relevant to early undergraduate students includes the “Species browser,” accessible through the “Discover plants and fungi” subpage. This searchable database includes full-text encyclopedia-style content for 501 plant and fungi species with accompanying illustrations, brief bibliographies, and related web links.

Unique resources that may appeal to advanced undergraduates, graduate students, and faculty researchers include the collection of more than 30 original databases, most hosted by Kew, linked from the “People and data” subpage. These resources document unique Kew collections, collaborative projects, taxonomies, and descriptive species summaries. Search fields differ by database, with some providing advanced search options and search tips, and most requiring basic knowledge of plant taxonomy to conduct an effective search. Just a few of the most significant databases include the Millennium Seed Bank Seed List, DNA Bank Database, and Economic Botany Collection. Notably, both the Millennium Seed Bank and DNA Bank databases enable noncommercial researchers to order physical samples for use in original research.

Though navigation can present an initial challenge for resource discovery, Kew Science is a recommended reference for basic plant and fungi information, as well as a valuable resource for advanced researchers in the plant sciences—biology, ecology, conservation, and genetics—in addition to ethnobotany. —*Amy Jankowski, University of New Mexico, ajankowski@unm.edu*

Smithsonian Digital Volunteers: Transcription Center. Access: <https://transcription.si.edu/>.

The Smithsonian Digital Volunteers Transcription Center opened in July 2013 to solicit volunteer assistance with transcribing documents from the Smithsonian’s museums, archives, and libraries. To date, more than 1,000 projects have been part of this process, and more than 6,900 volunteers have helped the

Smithsonian Institute (SI) transcribe field notes, ledgers, manuscripts, scientific specimen labels, diaries, and photo albums. To date, more than 202,000 pages of materials have been transcribed—all by volunteers. The Smithsonian Transcription Center site includes sections on both the process of transcribing and the final, transcribed materials.

Those who have worked with library or archival volunteers are no doubt aware that the quality of a volunteer’s work is heavily dependent on how well they are trained. The transcription process includes transcription, review, and approval steps, with volunteers handling the first two. SI’s Transcription Center features multilevel training on their website in a very user-friendly “Learn How To Transcribe” section that includes basic and advanced transcription instructions, as well as instructions for the reviewers. After a document has been transcribed and reviewed, an SI staff member then either approves it or sends it back to transcribers for further edits. It’s a very well-designed process for transcribing digitized materials.

The site has handled many projects, grouped into such sections as “Freedmen’s Bureau,” “American Experience,” “Endangered Languages,” and “Mysteries of the Universe,” all drawing from a range of SI’s museums and archives. You can select a different theme or museum and check the status of projects that are currently being transcribed, as well as completed projects. Selecting the National Museum of the American Indian Archives Center brings up partially completed documents, one showing that it is 50% complete, has 81 pages, and has been worked on by 20 volunteers.

The extent and variety of transcribed materials reflects the diversity of the Smithsonian’s collections, and users looking for final documents can find a wealth of material. This reviewer spent a lot of time examining the Apollo 11 stowage lists—the detailed, item-by-item list of everything that went on board, including, of course, detailed weights. Thanks to the work of SI’s volunteer transcriptionists, this amazing piece of history is now online and viewable. This is crowdsourcing at its best.—*Gene Hyde, University of North Carolina-Asheville, ghyde@unca.edu* ♪