Article: The 16 Most-Frequently-Asked Questions About Chocolate
Periodical: Chocolatier
Month and Year: February/March 2000
Notes: The magazine went through 16 years of its history to find the most often asked questions regarding chocolate. Most questions have to do with terminology (e.g. What is Dutch processed cocoa? What is ganache?) or cooking with chocolate (How can I prevent chocolate from seizing?). Good resource for answers to questions the public might also be asking. See below for information on Chocolatier magazine.

Article: The Chocolate Factor (Chocolate Could Bring the Forest Back)
Periodical: World Watch
Month and Year: November/December 2001 (Vol. 14, No. 6)
Notes: Written by Chris Bright, this article proposes that the reformation of cacao farming is necessary to restore the fragmented rainforests of Brazil’s Bahia state.

Article: Chocolate Food of the Gods
Periodical: National Geographic
Month and Year: November 1984
Notes: A lengthy article with good photographs.

Article: Chocolate Molds
Periodical: Country Living
Month and Year: April, 2000
Notes: The article discusses the history of molds and gives information about collecting them.

Article: Cocoa Craving
Periodical: Wine Spectator
Month and Year: February 29, 2000
Notes: The article focuses on premier lines of chocolate.

Article: Like Water for Chocolate: Feasting and Political Ritual Among the Late Classic Maya at Xunantunich, Belize
Author: Lisa LeCount
Journal: American Anthropologist
Volume: 103 (4): 935-953

Article: A New Genus and Species of Furnariid from the Cocoa-Growing Region of Southeastern Bahia, Brazil
Journal: The Wilson Bulletin
Month and Year: September 1996 (Vol. 108, No. 3)
Notes: This scientific article is about the Pink-legged Graveteiro, a new genus and species in the family of birds, Furnariidae, which was recently found in the cacao plantations of Brazil. This bird and its discovery are included in the Chocolate exhibition.

Article: Uto-Aztecan Perspective on Cacao and Chocolate
Journal: Ancient Mesoamerica (Cambridge University Press)
Date: Spring 2000 (Vol. II, No. 1)
Notes: Authors propose that ‘cacao’ and ‘chocolate’ are Uto-Aztecan terms.

Articles: Various
Periodical: Chocolate Magazine
Month and Year: April, 1999 (Vol. 1, No. 1)
Notes: This issue of the English publication contains numerous articles of interest including, “Making Chocolate,” “Chocolate History” (about the history of chocolate houses), “The Cocoa Bean,” and “Chocolate Books.” See their Web site: www.chocolate-magazine.co.uk for ordering information. Their magazine may also be available from specialty newsstands or bookstores.
**Periodical/Journal List/Website List**

### Articles: Various
Periodical: *Chocolatier magazine*
Published: six times per year.

**Notes:** Primarily recipes for chocolate and pastries; information on new products, chocolatiers and confectioners. Subscription information at: www.bakingshop.com/magazine/chocolatier

### Articles: Various
Periodical: *Faces: People, Places and Cultures*
Published: monthly.

**Notes:** Geared towards ages 9–14. Past issues that have dealt with chocolate or cacao include: Mexico (December 2000) and El Salvador (November 1998). See their Web site for back issues: www.cobblestonepub.com.

### Articles: Various
Periodical: *The New Internationalist (Issue: The Cocoa Chain)*
Month and Year: August 1998 (No. 304)

**Notes:** This issue includes a number of articles about cacao production in Ghana and focuses on the experiences of one Ghanaian cacao farmer. The articles are available online at www.newint.org. An article, “Facts-Chocolate” accompanies informational graphs depicting where chocolate is grown versus where it is consumed, as well as the “production chain” of chocolate. Perspective of magazine is to promote policies and company practices that help small producers of cacao. The magazine is published in England.

### Web Site List
**Top Ten Web Sites**

- [www.fieldmuseum.org](http://www.fieldmuseum.org)
- [www.barry-callebaut.com](http://www.barry-callebaut.com)
  - Contains interesting facts and information not found on other Web sites reviewed.
- [www.candyusa.org](http://www.candyusa.org)
  - Good listing of statistics related to chocolate and candy consumption.
- [www.chocolateandcocoa.org](http://www.chocolateandcocoa.org)
  - Comprehensive information on a number of topics related to cacao production.
- [www.chocolate-elrey.com](http://www.chocolate-elrey.com)
  - Nice visuals and explanations of different varieties of cacao.
  - Web cast and newsletter about chocolate.
- [www.hersheys.com](http://www.hersheys.com)
  - “Kid-friendly” virtual factory tour.
- [www.howstuffworks.com/chocolate](http://www.howstuffworks.com/chocolate)
  - Simple format with good information.
- [www.icco.org](http://www.icco.org)
  - Incredible amount of information and links.
- [www.scharffen-berger.com](http://www.scharffen-berger.com)
  - Great virtual tour of factory with detailed descriptions of steps.
- [www.sciencefriday.com](http://www.sciencefriday.com)
  - Audio cast of episode with guests Allen Young and Russ Greenberg.
General/Chocolate Today

Address: [www.candyusa.org](http://www.candyusa.org)

Description: Web site for both the Chocolate Manufacturers of America (CMA) and the National Confectioners Association. Contains much information about candy in general, current statistics on worldwide chocolate consumption (figures from 1994 and 1998), as well as factoids/statistics relating to holiday consumption. Press Release section includes numerous articles and information on the CMA’s initiative regarding child labor issues in West Africa.

Address: [www.chocolateandcocoa.org](http://www.chocolateandcocoa.org)

Description: A new Web site that has dubbed itself “the official site for the U.S. chocolate industry.” Comprehensive information covers supply and outlook, cocoa research, cacao farming, buying and selling cocoa, producing chocolate, regulatory issues, health and nutrition, and current events. Cacao farming section includes information on their sustainable agriculture programs. Explanations are given (many with photographs) for the difference between cacao production and chocolate manufacturing, for the pests and diseases that affect cacao, and for farming practices (images include cacao seedlings in the beginning stages and cacao trees growing in the shade of banana and coffee trees until they are mature). Tidbits of interesting information abound, such as the name for cacao pod pickers, which is tumbadores.

Notes: Includes links to partner sites: Chocolate Manufacturers Association (CMA), American Cocoa Research Institute (ACRI), World Cocoa Foundation, and the Cocoa Merchants’ Association of America.

Address: [www.chocolate4u.com](http://www.chocolate4u.com)

Description: The relatively new International Chocolate Company’s site features single-bean™ chocolate bars (bars that are made with one type of bean from one country). Site includes a fun trivia quiz.

Address: [www.chocolatevalley.com](http://www.chocolatevalley.com)

Description: A self-described Web portal, this site provides e-community and e-commerce in addition to other components. Interviews with chocolatiers, tips from the pros, a glossary of chocolate terms, and a comparison of chocolate and carob can be found. The science of chocolate section discusses chocolate toxicity and pets.

Address: [www.chocolate-elrey.com](http://www.chocolate-elrey.com)

Description: Web site posts striking botanical and historical images. Chocolate El Rey is based in Venezuela and only uses Venezuelan-grown cacao in their products. Many feel that this chocolate, the criollo variety, is one of the finest in the world. Clear descriptions and images depict the three varieties of cacao and explain how the different colors of the cotyledons (embryonic leaves inside bean) impact flavor.

Notes: Products for sale include a kit for making your own chocolate from scratch, a popular product for children. Chocolate disks and nibs are also available on-line. A 15-minute video can be ordered. The film focuses on production in Venezuela with footage of growing, harvesting and producing chocolate as well as a brief history of chocolate. While it has a promotional slant it is a good, brief film.


Description: San Francisco's Exploratorium museum hosted a two-hour web cast on chocolate on Valentine's Day in 1999. Moderated by local NPR personality Sedge Thompson, the web cast featured traditional Aztec chocolate-making as well as interviews with Robert Steinberg of Scharffen Berger Chocolate, confectioner Joseph Schmidt (including a tour of his plant), and scientists Andrew McGee and Andrew Waterhouse.

Notes: Web cast can be viewed with Real Video. There is also an online newsletter, The Sweet Lure of Chocolate, that includes interesting video (cutting a cacao pod and eating the white pulp; a tour of the Scharffen Berger factory) and audio clips (scientists explaining different processes and current research). Newsletter contains links to other Web sites.

Address: [www.Ghirardelli.com](http://www.Ghirardelli.com)

Description: Site includes in-depth information about the history of cacao, company history, and the steps Ghirardelli uses to make their chocolate. Link included to the Web site of their Swiss parent company, Lindt, which has a “Chocomania” section with interesting chocolate history and timeline with rare details on European history. Timeline also describes Mayan use of cacao beans for units of calculation.
Notes: Student information packs are available by writing: Ghirardelli Chocolate Company, 1111 139th Ave., San Leandro, CA 94578-2631, Attn: Consumer Affairs.

Address: [www.howstuffworks.com/chocolate](http://www.howstuffworks.com/chocolate)

Description: This edition of How Stuff Works by Marshall Brain includes simple, easy-to-read text and brilliant close-up images of cacao. After an introduction to “How Chocolate Works,” sections include the cacao bean, raw chocolate, making chocolate, and additional information. Great images include a cacao seedling, pods on the tree, and harvested pods. Interesting links discuss “How do they make hollow chocolate Easter rabbits?,” “Is chocolate poisonous to dogs?,” and “How caffeine works.” An additional link, “The misadventures of home cocoa bean roasting,” demonstrates the technological process that roasting has become.

Notes:

Address: [www.hhwvi.com](http://www.hhwvi.com)

Description: Site for Hawaiian Vintage Chocolate company—the only company that grows cacao in the United States. Includes information about the history of cacao and its manufacturing. Lists Hawaiian as a type of cacao in addition to criollo, trinitario, and forastero. Mentions some interesting facts about the relative number of flowers that bloom per year (10,000), the number pollinated (1,000), and the number of pods that develop (100). Out of these hundred, many drop due to a natural thinning process. Importance of fermentation to development of taste included.

Notes: Can order unroasted cacao beans and cocoa nibs (edible roasted inside of bean) from company. See supply resources for prices.

Address: [www.education-world.com/a_lesson/lesson142.shtml](http://www.education-world.com/a_lesson/lesson142.shtml)

Description: Contains a dozen candy-related classroom activities with links to the Exploratorium web cast (mentioned above), Ghirardelli, and Hershey’s. Mentions the book, The Big Block of Chocolate by Janet Slater.

Notes: The world site also contains numerous other classroom activities on a number of subjects. Lesson 024 covers plant photosynthesis and how plant leaves work.

Address: [www.sciencefriday.com](http://www.sciencefriday.com)

Description: NPR’s Ira Flatow hosts this edition of Science Friday, “The Science of Chocolate,” with guests including Allen Young, author of The Chocolate Tree, and Russ Greenberg of the Smithsonian’s Migratory Bird Center. The show can be heard with Real Audio.

Notes: Get to this episode from the home page by going to Archives, February, 1998: The Science of Chocolate.

Address: [www.sci.mus.mn.us/sln/tf/c/cacao/cacao](http://www.sci.mus.mn.us/sln/tf/c/cacao/cacao)

Description: Part of the Science Learning Network Thinking Fountain from the Science Museum of Minnesota. Introductory questions lead to further exploration, and cultural connections are made with the Maya. Includes image of a ruler with a pod and bean to show relative size. Activity suggestion: make a cross section of a candy bar and see how many ingredients can be identified. What would cross sections of other foods look like?

Rainforest/Growers

Address: [www.acri-cocoa.org](http://www.acri-cocoa.org)

Description: Site for the American Cocoa Research Institute (research arm of the Chocolate Manufacturers Association). Includes additional information about their sustainable agriculture initiatives.

Address: [www.amnh.org](http://www.amnh.org)

Description: Allen Young’s research with midges and sustainable cacao production in Costa Rica is featured on this Web site for the American Museum of Natural History. One of the Museum’s BioBulletins by Young is entitled, “No More Chocolate? How the Rain Forest and a Tiny Fly Make Chocolate Happen.” Included is a video clip featuring Dr. Young in Costa Rica. In it, he points out that while the tree’s trunk may be covered with flowers, only 1–2% produce pods. Dr. Young is the scientist who discovered that midges pollinated cacao flowers.

Notes: Find the page by going to the “On Exhibit” section of the Web site. Click on the following: Science Bulletins, Hall of Biodiversity, and Bulletin Archives; then scroll down to Fall 1998. See additional notes about Dr. Young in the Book List (The Chocolate Tree: A Natural History of Cacao) and the Speaker’s List.
Address: [www.eduweb.com/amazon.html](http://www.eduweb.com/amazon.html)

Description: Interactive Web site based on the Ecuadorian Amazon region. Gives information on the physical and human geography of the area as well as the risks and benefits of ecotourism. Includes an interactive game based on developing coffee production or ecotourism. The introduction to the farmerinteractive indicates that many farmers have turned to cacao harvesting to support their families, and that one hectare produces about 300 lbs. of cacao beans, worth about $120 in the market. Site compares rainfall in this region to regions of the United States (you can enter your home region).

**Notes:** Part of the Eduweb adventures.

Address: [www.rain-tree.com](http://www.rain-tree.com)

Description: Company-based Web site for their line of rainforest plant-based herbal medicines and supplements. Contains information about rainforests and their environmental importance.

**Notes:** Good resources for teachers, including images of rainforest scenes, plants and animals, and background information. Contains new section for school reports and numerous links to other Web sites for current events and maps.

Address: [www.natzoo.si.edu/smbc](http://www.natzoo.si.edu/smbc)

Description: This site for the Smithsonian Migratory Bird Center features a number of scientific papers on shade-grown cacao from a 1998 workshop in Panama (in Research section). Includes fact Sheet on migrant birds and coffee production that also refers to cacao.

**Maya/Aztec**

Address: [www.nativeweb.org/pages/pyramids/overview.html](http://www.nativeweb.org/pages/pyramids/overview.html)

Description: Contains background information on the Maya and Aztecs.

Address: [www.educapes.com/42explore/aztec.html](http://www.educapes.com/42explore/aztec.html)

Description: Lists activities and Web site links for exploring the Aztecs.

**Notes:** Good for teachers/students.

Address: [www.yale.edu/ynhti/curriculum/units/1992/2/92.02.05.x.html](http://www.yale.edu/ynhti/curriculum/units/1992/2/92.02.05.x.html)

Description: Part of the Yale New Haven Teachers Institute includes teacher written curriculum, “Rediscovering the Aztec Indians.”

**Notes:** Comprehensive curriculum (designed for grades 3 & 4) and information; mentions cacao consumption. Classroom activities provided.

Address: [www.northcoast.com/~spdtom/aztec.html](http://www.northcoast.com/~spdtom/aztec.html)

Description: Student/teacher resource center for Mexican history with listings of books, music, and videos.

Address: [www.campus.northpark.edu/history/WebChron/Americas/AztecEmp.html](http://www.campus.northpark.edu/history/WebChron/Americas/AztecEmp.html)

Description: Brief background information about Aztec Culture, 1400–1519.

**Notes:** Link to page about the conquest of the Aztecs. Site based at North Park University.

**Europe/Slavery**

Address: [www.barry-callebaut.com](http://www.barry-callebaut.com)

Description: The merger between a French and a Belgian chocolate company produced Barry Callebaut, which in turn created a Web site featuring a wealth of information. “Chocolate World” includes a section discussing the processes from cocoa to chocolate, the Aztec Quetzalcoatl myth, and the spread of chocolate use through Europe. Other notable facts are found in the section on how cocoa is grown; the production section features good images of the steps involved. Rare information about the characteristics of cocoa butter (in FAQs) can be found, as well as the difference between open and captive market companies producing cacao. The site also contains information about work practices in West Africa. Good map shows cacao production, noting current and future trends.
Address: **www.cadbury.co.uk**  
**Description:** The British manufacturer Cadbury maintains an extensive Web site. In the “Chocolate Encyclopedia,” the Story of Chocolate includes Making Chocolate, Chocolate History and Cocoa, and Packaging and Design. Various entries in each section allow the browser to learn more about the manufacturing of drinking chocolate, chocolate across Europe, the colonization of cacao-producing countries, chocolate houses in London, and the origin of the Easter egg.  
See www.Ghirardelli.com notes in General/Chocolate Today section above for link to parent company, Lindt.

**Manufacturing/World Trade**

Address: **www.csce.com**  
**Description:** Coffee, Sugar, and Cocoa Exchange Web site; part of the New York Board of Trade site. Seminar section displays quarterly statistics on cacao products, market information, and prices.

Address: **www.hersheys.com**  
**Description:** Includes a more “child-friendly” tour of a chocolate factory. Browsers can take a video tour of the various steps from rainforest to chocolate bar. Each of the six segments lasts about a minute. Pictorial and text tour are also available (though video version gives more information). In the Kidztown section there are games, recipes and information on different chocolate making techniques. Consumer information section includes links to chocolate’s history and the story of founder Milton Hershey.  
*Notes:* There are many links to Hershey products with their own Web sites, including the Hershey Kissmobile.

Address: **www.icco.org**  
**Description:** The site of the International Cocoa Organization, based in London, has extensive information and a “question and answer” section that includes production costs, major ports importing and exporting beans, and links to manufacturing company Web sites worldwide.